

University of Alaska
Anchorage

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About the University

UAA History

The University of Alaska Anchorage traces its origins back to 1954, when Anchorage Community College (ACC) was founded. That year, ACC began offering evening classes to 414 students at Elmendorf Air Force Base—the first time that college-level courses were offered in the Anchorage area. In 1962, ACC, along with other community colleges around the state, was incorporated into the University of Alaska statewide system. Five years later, ACC began offering both day and evening classes at the current campus location. ACC provided academic study for associate degrees, the first two years of work toward baccalaureate degrees, and a wide variety of adult learning, career and continuing education programs.

In the late 1960s, strong interest in establishing a four-year university in Anchorage brought about the birth of the University of Alaska, Anchorage Senior College (ASC). While ACC administered the lower-division college, ASC administered upper-division and graduate programs leading to baccalaureate and master's degrees, as well as continuing education for professional programs. In 1971, the first commencement was held at Anchorage's West High School, where 265 master's, baccalaureate and associate degrees were awarded. ASC moved to the Consortium Library Building in 1973. The following year, when the first classroom and office facility was completed, daytime courses were offered for the first time. In 1977, ASC became a four-year university and was renamed the University of Alaska, Anchorage (UA,A). Ten years later, ACC and UA,A merged to become what is now known as the University of Alaska Anchorage (UAA).

Today, some 20,000 students attend UAA, a growing and expanding university of first choice. More than 200 programs, ranging from certificate programs to associate, baccalaureate, master's, and doctoral degrees, are offered at the campus in Anchorage, community campuses, and extension centers throughout Southcentral Alaska.

UAA Mission

The mission of the University of Alaska Anchorage is to discover and disseminate knowledge through teaching, research, engagement and creative expression. Located in Anchorage and on community campuses in Southcentral Alaska, UAA is committed to serving the higher education needs of the state, its communities and its diverse peoples. UAA is an open-access university with academic programs leading to occupational endorsements; undergraduate and graduate certificates; and associate, baccalaureate and graduate degrees in a rich, diverse and inclusive environment.

UAA Core Themes

The UAA mission recognizes the university's commitment to instruction at a number of academic levels, success of all students regardless of their higher education goals, and service to the diverse peoples and communities of the state. It honors the community college and the baccalaureate, graduate and research roots of the institution.

Five core themes for UAA further define the mission. These core themes are:

1. Teaching and Learning
2. Research, Scholarship and Creative Activity
3. Student Success
4. UAA Community
5. Public Square

This set of core themes has been approved by the Chancellor's Cabinet and the Board of Regents.

International and Intercultural Values Statement

UAA is committed to international and intercultural education. As part of UAA's participation in the American Council on Education's (ACE) Internationalization Laboratory, the following values were developed in consultation with faculty, students and staff. These values help guide the development of international and intercultural programs and services at UAA. UAA and its students aim to:

- Understand one's own culture(s) within an Alaskan, national and global context.
- Apply knowledge and critical thinking to global and cultural issues, trends and systems, and use diverse frames of reference to address problems.
- Communicate and connect with people in other communities to extend one's own access to information, experiences and understanding.
- Foster additional languages, including Alaska Native languages, as a component of the UAA experience.
- Develop an informed critical awareness and understanding of cultural differences, similarities and ambiguities.
- Gain an Alaskan, national and international perspective on careers.

The above were approved by the International and Intercultural Task Force on March 9, 2012, and approved by the provost and executive vice chancellor and the vice chancellor for Student Affairs on May 2, 2012.

Diversity Statement

UAA recognizes and values the diversity of our unique location in Southcentral Alaska, the ancestral homelands of the Dena'ina Athabaskan, Ahtna Athabaskan, Alutiiq/Sugpiak and Eyak peoples.

We honor diverse experiences and perspectives—including differences in ideas, religion, gender, gender identity, sexual orientation, ethnicity, race, culture, nationality, age, disability, veteran and socioeconomic status—and strive to create welcoming and inclusive learning environments where all are treated with respect.

At UAA, valuing diversity is integral to excellence. Diversity maximizes our potential for creativity, innovation, educational excellence and outstanding service to our communities.

Accreditation

Institutional Accreditation

The University of Alaska Anchorage has been accredited by the Northwest Commission on Colleges and Universities (NWCCU) since 1974. This single accreditation status applies to all UAA campuses, including Anchorage, Kenai Peninsula College, Kodiak College, Matanuska-Susitna College and Prince William Sound College.

Accreditation of an institution of higher education by the NWCCU indicates that it meets or exceeds criteria for the assessment of institutional quality evaluated through a peer review process. An accredited college or university is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by the NWCCU is not partial but applies to the institution as a whole. As such, it is not a guarantee of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Inquiries regarding an institution's accreditation status by the NWCCU should be directed to the administrative staff of the institution. For more information, see the Office of Academic Affairs website (<https://www.uaa.alaska.edu/academics/office-of-academic-affairs/institutional-accreditation/index.cshml>) or call (907) 786-1054.

Individuals may also contact:

Northwest Commission on Colleges and Universities (<http://www.nwccu.org>)
 8060 165th Ave. N.E., Suite 100
 Redmond, WA 98052
 Phone: (425) 558-4224

Program Accreditation

When available, individual academic programs often seek verification that their program of study and student outcomes meet national standards established by independent associations or governmental agencies. That verification is documented as a program accreditation. Students who complete an accredited curriculum enjoy additional confidence that experts in that field have evaluated the program and testified to its quality. Program accreditation may also enable students to more easily obtain professional certifications or registration.

The following programs have approval and/or accreditation from agencies external to UAA.

Art

Degrees: Bachelor of Arts in Art; Bachelor of Fine Arts in Art

Accrediting Agency: National Association of Schools of Art and Design (NASAD)

Automotive and Diesel Technology

Degrees: Undergraduate Certificate in Automotive Technology; Associate of Applied Science in Automotive Technology with options in general automotive and General Motors ASEP; Undergraduate Certificate in Diesel Power Technology; Associate of Applied Science in Diesel Power Technology

Accrediting Agency: National Automotive Technicians Education Foundation (NATEF)

Aviation Maintenance Technology

Degrees: Undergraduate Certificate in Aviation Maintenance Technology, Airframe; Undergraduate Certificate in Aviation Maintenance Technology, Powerplant; Associate of Applied Science in Aviation Maintenance Technology

Accrediting Agency: Federal Aviation Administration (FAA) approved 14 CFR Part 147 Aviation Maintenance Technician School

Business Administration

Degrees: Bachelors of Business Administration in Accounting, Economics, Finance, Global Logistics and Supply Chain Management, Management, Management Information Systems, and Marketing; Bachelor of Arts in Economics; Master of Business Administration in General Management; Master of Science in Global Supply Chain Management

Accrediting Agency: Association to Advance Collegiate Schools of Business (AACSB International)

Civil Engineering

Degrees: Bachelor of Science in Civil Engineering

Accrediting Agency: Engineering Accreditation Commission of ABET, Inc.

Clinical-Community Psychology

Degrees: Doctor of Philosophy in Clinical-Community Psychology (jointly offered with the University of Alaska Fairbanks)

Accrediting Agency: American Psychological Association (APA)

Computer Science

Degrees: Bachelor of Science in Computer Science

Accrediting Agency: Computing Accreditation Commission of ABET, Inc.

Computer Systems Engineering

Degrees: Bachelor of Science in Computer Systems Engineering

Accrediting Agency: Engineering Accreditation Commission of ABET, Inc.

Construction Management

Degrees: Associate of Applied Science in Construction Management; Bachelor of Science in Construction Management

Accrediting Agency: American Council for Construction Education (ACCE)

Culinary Arts

Degrees: Associate of Applied Science in Culinary Arts

Accrediting Agency: Accrediting Commission of the American Culinary Federation Education Foundation (ACFEF)

Dental Assisting

Degrees: Undergraduate Certificate in Dental Assisting

Accrediting Agency: Commission on Dental Accreditation of the American Dental Association (CODA)

Dental Hygiene

Degrees: Associate of Applied Science in Dental Hygiene

Accrediting Agency: Commission on Dental Accreditation of the American Dental Association (CODA)

Dietetic Internship

Degrees: Graduate Certificate in Dietetic Internship

Accrediting Agency: Accreditation Council for Education in Nutrition and Dietetics (ACEND)

Dietetics

Degrees: Bachelor of Science in Dietetics

Accrediting Agency: Accreditation Council for Education in Nutrition and Dietetics (ACEND)

Education

Degrees: Bachelors of Arts in Early Childhood and in Elementary Education; Minor in Early Childhood Special Education; Post-Baccalaureate Certificates in Early Childhood and Elementary Education; Graduate Certificates in Special Education (K-12) and in Educational Leadership (K-12); Principal; Master in Arts in Teaching; Masters of Education in Early Childhood Special Education, Special Education (K-12), and in Educational Leadership (K-12)

Accrediting Agency: National Council for Accreditation of Teacher Education (NCATE)/Council for the Accreditation of Educator Preparation (CAEP)

Degrees: Associate of Applied Science in Early Childhood Development

Accrediting Agency: National Association for the Education of Young Children (NAEYC) Commission on the Accreditation of Early Childhood Higher Education Programs

All education certification and endorsement programs are approved by the Alaska Department of Education and Early Development and are based on CAEP specialty program association (SPA) standards.

Electrical Engineering

Degrees: Bachelor of Science in Electrical Engineering

Accrediting Agency: Engineering Accreditation Commission of ABET, Inc.

Fire and Emergency Services Technology

Degrees: Associate of Applied Science in Fire and Emergency Services Technology

Accrediting Agency: United States Fire Administration (USFA) recognition

Geomatics

Degrees: Bachelor of Science in Geomatics

Accrediting Agency: Applied Science Accreditation Commission of ABET, Inc.

Human Services

Degrees: Associate of Applied Science in Human Services; Bachelor of Human Services in Human Services

Accrediting Agency: Council for Standards in Human Service Education (CSHSE)

Journalism and Public Communications

Degrees: Bachelor of Arts in Journalism and Public Communications

Accrediting Agency: Accrediting Council on Education in Journalism and Mass Communications (ACEJMC)

Legal Studies

Degrees: Bachelor of Arts in Legal Studies; Minor in Legal Studies; Associate of Applied Science in Paralegal Studies; Post-Baccalaureate Certificate in Paralegal Studies; Undergraduate Certificate in Legal Nurse Consultant Paralegal

Accrediting Agency: Approved by the American Bar Association (ABA)

The American Bar Association approves paralegal programs. Accreditation is reserved for law schools.

Mechanical Engineering

Degrees: Bachelor of Science in Mechanical Engineering

Accrediting Agency: Engineering Accreditation Commission of ABET, Inc.

Medical Assisting

Degrees: Associate of Applied Science in Medical Assisting

Accrediting Agency: Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Medical Assisting Education Review Board (MAERB)

Medical Laboratory Science

Degrees: Bachelor of Science in Medical Laboratory Science

Accrediting Agency: National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)

Medical Laboratory Technology

Degrees: Associate of Applied Science in Medical Laboratory Technology

Accrediting Agency: National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)

Music

Degrees: Bachelor of Arts in Music; Bachelor of Music in Music

Accrediting Agency: National Association of Schools of Music (NASM)

Nursing

Degrees: Associate of Applied Science in Nursing; Bachelor of Science in Nursing Science; Master of Science in Nursing Science; Graduate Certificate in Family Nurse Practitioner; Graduate Certificate in Nursing Education; Graduate Certificate in Psychiatric and Mental Health Nurse Practitioner

Accrediting Agency: Accreditation Commission for Education in Nursing (ACEN); Approved by Alaska Board of Nursing

Degrees: Doctor of Nursing Practice in Nursing Science

Accrediting Agency: Commission on Collegiate Nursing Education (CCNE); Approved by Alaska Board of Nursing

Paramedical Technology

Degrees: Associate of Applied Science in Paramedical Technology delivered at UAA's Matanuska-Susitna College

Accrediting Agency: Commission on Accreditation of Allied Health Programs upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP)

Degrees: Associate of Applied Science in Paramedical Technology delivered at UAA's Kenai Peninsula College

Letter of Review: Letter of Review by the Commission on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP Executive Office)

More information about the above for the Paramedical Technology AAS is available here (<https://catalog.uaa.alaska.edu/undergraduateprograms/coh/paramedicaltechnology>).

Pharmacy

Degrees: Pharmacy Doctorate (offered by Creighton University with collaboration of UAA)

Accrediting Agency: Accreditation Council for Pharmacy Education (ACPE) (through Creighton University)

Degrees: Pharmacy Doctorate (offered by Idaho State University with collaboration of UAA)

Accrediting Agency: Accreditation Council for Pharmacy Education (ACPE) (through Idaho State University)

Physical Therapist Assistant

Degrees: Associate of Applied Science in Physical Therapist Assistant

Accrediting Agency: Commission on Accreditation in Physical Therapy Education (CAPTE)

Physician Assistant (MEDEX)

Degrees: Bachelor of Science in Health Sciences, Physician Assistant Track

Accrediting Agency: Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) (through the University of Washington)

Students in the MEDEX Northwest Anchorage Bachelor's Program have the option of getting a bachelor's degree through UAA or UW.

Process Technology

Degrees: Associate of Applied Science in Process Technology

Accrediting Agency: North American Process Technology Alliance (NAPTA) endorsement

Professional Piloting

Degrees: Associate of Applied Science in Professional Piloting; Bachelor of Science in Aviation Technology, professional piloting emphasis

Accrediting Agency: Federal Aviation Administration (FAA) approved 14 CFR Part 141 Pilot School

Project Management

Degrees: Master of Science in Project Management

Accrediting Agency: Global Accreditation Center for Project Management

Public Health Practice

Degrees: Master of Public Health in Public Health Practice
Accrediting Agency: Council on Education for Public Health (CEPH)

Social Work

Degrees: Bachelor of Social Work in Social Work; Master of Social Work in Social Work
Accrediting Agency: Council on Social Work Education (CSWE)

WWAMI School of Medical Education

Degrees: Doctor of Medicine (offered by University of Washington School of Medicine by agreement with the states of Washington, Wyoming, Alaska, Montana, and Idaho)
Accrediting Agency: Liaison Committee on Medical Education (through the University of Washington School of Medicine by the WWAMI agreement)

Other Educational Opportunities

Study Exchanges

Students are encouraged to explore educational experiences through a number of education abroad and national or international student exchange opportunities.

Students Going Abroad (<http://www.uaa.alaska.edu/ed-abroad>)

Education Abroad Coordinator
Administration & Humanities Building, Room 101Q
(907) 786-4348

uaa_oiaa@alaska.edu

The education abroad coordinator serves out-bound students, helping them identify international education opportunities that meet their goals. Early in their studies, students should seek counsel from their academic advisors as well as the education abroad coordinator to identify programs that offer the best fit academically and personally. For more information, go to the Education Abroad website (<https://www.uaa.alaska.edu/academics/office-of-academic-affairs/study-abroad/index.cshtml>).

International Exchange Students Coming to UAA (<http://www.uaa.alaska.edu/international-student-services>)

Office of Admissions
University Center
3901 Old Seward Highway
Anchorage, AK 99503
(907) 786-1480

UAA International Student Services (ISS) serves in-bound exchange students. The Office of Admissions is the liaison between the University of Alaska Anchorage, the Department of State and U.S. Immigration and Customs Enforcement agencies with the responsibility for issuing required documentation for incoming international students.

National Student Exchange (<http://www.uaa.alaska.edu/records/national-student-exchange.cfm>)

Office of the Registrar
University Center
3901 Old Seward Highway
Anchorage, AK 99503
(907) 786-1480

The National Student Exchange is a unique, not-for-profit consortium of nearly 200 accredited, baccalaureate granting colleges and universities within the United States, Canada, Guam, Virgin Islands and Puerto Rico. For more information, contact the UAA Office of the Registrar or visit the NSE website (<http://www.nse.org>).

Military Programs

UAA supports military personnel and their families throughout the UAA service area through UAA Military Programs. With two locations on Joint Base Elmendorf/Richardson (JBER), UAA offers courses for active-duty, National Guard and Reserve personnel; their spouses and dependents; and Department of Defense civilian personnel.

Course offerings support completion of Community College of the Air Force degrees and courses leading to degrees offered by UAA. Classes are offered in a variety of classroom and e-learning formats.

UAA is a GoArmyEd school and participates in the Air Force Education Portal and the My Career Advancement Program offered to spouses. UAA accepts DSST and CLEP exams and evaluates military training for degree-seeking students.

Courses at Elmendorf are offered at:

JBER-Elmendorf
4109 Bullard Ave., Suite 107
JBER-Elmendorf, AK 99506
(907) 753-0204

Courses at Fort Richardson are offered at:

JBER-Richardson
Building 7 Chilkoot Ave.
JBER-Richardson, AK 99505
(907) 428-1228

Professional Development and Continuing Education

Professional and Continuing Education (PACE) (<https://www.uaa.alaska.edu/academics/college-of-education/professionals/pace.cshtml>)

(907) 786-1933
pace@alaska.edu

Quality professional learning enriches the knowledge and skills of educators and improves the educational experiences of all students. Therefore, the PACE Office partners with UAA academic units, schools, professional societies and other organizations to support learning opportunities such as 500-level courses and academies. The flexible structure of PACE allows for rapid response to the dynamic

learning needs of educators and related services professionals around the state.

Secondary Programs

Career and Technical Education

UAA partners with school districts throughout Southcentral Alaska to articulate high school technical coursework with specific UAA technical courses that lead to a UAA certificate or degree. After matriculating into UAA as a certificate or degree-seeking student, students may apply for nontraditional transfer credit, providing the courses were articulated and approved at the time of completion. To receive this credit, students must submit the appropriate form (<https://www.uaa.alaska.edu/students/registrar/registrarforms.cshtml>) to the Office of the Registrar and pay an administrative fee.

Students with questions about articulated career and technical education courses should contact the Office of the Registrar at (907) 786-1480 or uaa.transfer@alaska.edu (uaa.registration@alaska.edu).

Dual Credit and Concurrent Enrollment

Students who are registered simultaneously in an approved course at a secondary institution and at UAA are concurrently enrolled. The course follows the UAA syllabus and is taught by a high school instructor approved by the UAA program. Students must meet all prerequisites in order to register for the course, and they must meet all UAA deadlines, including registration and withdrawal deadlines. Students are subject to all UAA standards, including the UAA Student Code of Conduct (<https://www.uaa.alaska.edu/deanofstudents/studentconduct/code.cfm>) guidelines for academic integrity. Credit received through concurrent enrollment will be considered resident credit and will be included in the student's UAA grade point average (GPA). Concurrent enrollment credit results in a permanent transcript notation, which can have implications for, among other things, admission to a post-secondary institution, transfer, scholarships, and financial aid eligibility. Students pay a concurrent enrollment fee.

Students with questions about concurrent enrollment registration should contact the Office of the Registrar at (907) 786-1480 or uaa.registration@alaska.edu.

UAA Campuses, Colleges, Centers and Institutes

UAA Campuses

Anchorage Campus

www.uaa.alaska.edu (<http://www.uaa.alaska.edu>)

3211 Providence Drive
Anchorage, AK 99508
(907) 786-1480

Experience the Big Wild Life in Anchorage, population 300,000. UAA's campus maintains close connections with Anchorage-based government, business and nonprofit employers, giving students a wide range of opportunities for internships, research and real-world experience.

The Anchorage campus offers a full complement of programs and courses, including in high-demand fields such as engineering, health, business and education, as well as in the liberal arts and sciences. UAA career and technical education programs are closely aligned with Alaska's core industries, such as aviation, oil and gas. Many courses are designed with flexibility to accommodate students who work or have a family, and the campus houses a range of student success and support centers.

UAA's cozy campus is connected to 250 miles of trails where students can enjoy wooded seclusion, mountain vistas and ocean views. But students don't have to sacrifice urban amenities to live in the Last Frontier. Anchorage provides a bounty of museums, movie theaters, shopping, live music, professional sports and hundreds of restaurants. Students will feel right at home at UAA.

The following locations are administered under the Office of Academic Affairs.

Chugiak-Eagle River Campus (<https://www.uaa.alaska.edu/academics/institutional-effectiveness/departments/chugiak-eagle-river>)

10928 Eagle River Road, Suite 115
Eagle River, AK 99577
(907) 786-7600, Fax (907) 694-1491

JBER-Elmendorf (<https://www.uaa.alaska.edu/academics/institutional-effectiveness/departments/military-programs/index.cshtml>)

4109 Bullard Ave., Suite 107
JBER-Elmendorf, AK 99506
(907) 753-0204, Fax (907) 753-8390

JBER-Richardson (<https://www.uaa.alaska.edu/academics/institutional-effectiveness/departments/military-programs/index.cshtml>)

7 Chilkoot Ave.
JBER-Richardson, AK 99505
(907) 428-1228, Fax (907) 428-1002

Kenai Peninsula College

www.kpc.alaska.edu (<http://www.kpc.alaska.edu>)

156 College Road
Soldotna, AK 99669
(907) 262-0330 or (877) 262-0330

Kenai Peninsula College (KPC) is located south of Anchorage at two campuses in Soldotna and Homer and at an extension sites in Seward. KPC delivers Associate of Arts and Associate of Applied Science degrees, as well as courses leading to vocational certificates. Some courses leading to baccalaureate degrees can be obtained entirely at KPC. A number of four-year degree programs are available at KPC via distance delivery through other UAA campuses. KPC has a robust e-learning program reaching students across Alaska.

The college offers academic advising, transfer information, financial aid assistance, career counseling and free tutoring. The college also serves students needing adult basic education, general equivalency

diploma (GED) tutoring and testing, and English as a second language and literacy instruction.

Kenai River Campus

156 College Road
Soldotna, AK 99669
(907) 262-0330

Perched on the banks of the Kenai River (home of the world-record king salmon), the campus is conveniently located between the communities of Kenai and Soldotna. This campus serves more than 2,000 students, or 70 percent of the students of KPC. The campus sits on more than 300 wooded acres and includes classrooms, library, laboratories, computer labs, vocational shops, media center, bookstore, art gallery, career center, learning center, food cafe, commons area, and outdoor walking and ski trails. Housing is available in a dormitory with 96 single-bedroom, four-person apartment suites.

Kachemak Bay Campus

533 E. Pioneer Ave.
Homer, AK 99603
(907) 235-7743

KPC's Kachemak Bay Campus is located on three acres in the coastal community of Homer. On the shores of Kachemak Bay and overlooking a vista of glaciers, Homer is one of the top small art towns in the U.S. and a recreational and maritime center of Alaska.

The campus provides programs and services on the southern Kenai Peninsula, serving more than 750 students. The campus delivers a wide variety of degree and continuing education courses and programs of excellence in a friendly, personalized setting. It consists of two buildings with classrooms, bookstore, science laboratories, art studio, computer lab, commons, library, learning resource center and student services center.

Resurrection Bay Extension Site

P. O. Box 1049
Seward, AK 99664
(907) 224-2285

KPC also offers classes in Seward. Various General Education Requirement (GER) courses and personal enrichment classes are delivered utilizing high school classrooms. KPC has an onsite coordinator at Seward High School, and about 10 classes are offered each semester.

Kodiak College

www.koc.alaska.edu (<http://www.koc.alaska.edu>)

117 Benny Benson Drive
Kodiak, AK 99615
(907) 486-4161

Kodiak College, located 250 miles south of Anchorage on Kodiak Island, serves the city of Kodiak, seven rural communities and the nation's largest U.S. Coast Guard base. Kodiak College provides

face-to-face and distance education courses leading to occupational endorsement and undergraduate certificates, associate and baccalaureate degrees, and college preparatory developmental education, adult basic education and GED preparation.

In addition to supporting for-credit college-level courses, the college also supports community-based instruction by providing services such as tutoring, research and testing for special interest, dual credit high school/college-level courses, and continuing professional education, vocational training and workforce development. The campus provides a support network for students taking e-learning courses from other college campuses. The campus is also a cultural center in the community that sponsors events such as readings by current authors, lectures, seminars, art shows and exhibits.

Matanuska-Susitna College

matsu.alaska.edu (<http://matsu.alaska.edu>)

P.O. Box 2889
Palmer, AK 99645
(907) 745-9774

Matanuska-Susitna College (Mat-Su College) is a community campus of the University of Alaska Anchorage. The Mat-Su campus houses a comprehensive library; science, computer, career and technical labs; a student advising center that includes financial aid assistance, veterans services, and career and academic advising; a learning center; modern classrooms; snack bar; and art gallery for student and faculty shows.

Located off Trunk Road on College Drive, 40 miles north of Anchorage and about halfway between Wasilla and Palmer, Mat-Su College serves nearly 2,000 students per semester and continues to experience strong growth rates. The Mat-Su Borough is the fastest growing area of the state. To meet the academic, career and technical needs of this expanding population, Mat-Su College delivers occupational endorsement certificates, undergraduate certificates, associate degrees and several levels of cooperative degrees with other University of Alaska campuses. Mat-Su College graduates leave prepared to enter the Alaska workforce or pursue further academic studies.

Prince William Sound College

pwsc.alaska.edu (<http://pwsc.alaska.edu>)

303 Lowe Street
P.O. Box 97
Valdez, AK 99686
(907) 834-1600

Prince William Sound College (PWSC) serves the vast Valdez, Copper Basin and Cordova regions. From the primary location in Valdez, about 300 miles southeast of Anchorage, PWSC provides access to a variety of educational and training opportunities in a geographically rich, culturally diverse and inclusive environment. The extension sites focus on concurrent and dual enrollment opportunities for high school students, as well as workforce training and special interest courses in the Copper Basin and Cordova service area. The extension sites also create a visible presence and serve as a resource for potential students

who want to pursue or continue a pathway into the University of Alaska System.

PWSC attracts people with an adventuresome spirit who want to combine the love of outdoor activities with the opportunity to achieve their academic and career goals. The College offers the Associate of Arts (general transfer) degree, A.A.S. degrees in Industrial Technology and Outdoor Leadership, a variety of professional development and workforce training courses and certifications, adult basic education and GED preparation. PWSC plays a unique role in protecting the Prince William Sound ecosystem through its extensive offerings of Fishing Vessel Training and related safety and preparedness training opportunities. Our Health & Fitness Center and the Whitney Museum provide recreational and cultural opportunities for students, community members, and visitors. In partnership with the BLM, Alyeska Pipeline Services, Providence Valdez Medical Center and numerous other local employers, PWSC provides internship and career pathway options. PWSC maintains three apartment-style residence buildings offering a variety of affordable, independent living options for residential students.

Copper Basin Extension Site

9998 Aurora Drive
P.O. Box 730
Glennallen, AK 99588
(907) 822-3673

Cordova Extension Site

100 Fisherman Avenue
P.O. Box 1248
Cordova, AK 99574
(907) 424-7598

UAA Colleges

College of Arts and Sciences (<https://www.uaa.alaska.edu/academics/college-of-arts-and-sciences>)

(907) 786-1707, Fax (907) 786-4630

Dr. John R.D. Stalvey, Dean

Social Sciences Building (SSB), Room 335

School of Education (<https://www.uaa.alaska.edu/academics/college-of-education>)

(907) 786-4613, Fax (907) 786-4445

Dr. Claudia Dybdahl, Interim Director

Professional Studies Building (PSB), Room 234

College of Business and Public Policy (<https://business.uaa.alaska.edu>)

(907) 786-4121, Fax (907) 786-4131

Dr. Karen Markel, Dean

Edward and Cathryn Rasmuson Hall (RH), Room 301

College of Engineering (<https://www.uaa.alaska.edu/academics/college-of-engineering>)

(907) 786-1900, Fax (907) 786-1079

Dr. Fred Barlow, Dean

Engineering and Industry Building (EIB), Room 403

College of Health (<https://www.uaa.alaska.edu/academics/college-of-health>)

(907) 786-4406, Fax (907) 786-4440

Jeffrey Jessee, Dean

Professional Studies Building (PSB), Room 205

Community and Technical College (<https://www.uaa.alaska.edu/academics/community-and-technical-college>)

(907) 786-6400, Fax (907) 786-6401

Dr. Denise Runge, Dean

University Center (UC), Room 141

University Honors College (<https://www.uaa.alaska.edu/academics/honors-college>)

(907) 786-1086, Fax (907) 786-1060

Dr. John Mouracade, Dean

Edward and Cathryn Rasmuson Hall (RH), Room 105

UAA Centers and Institutes

A center or institute is created on approval by the University of Alaska (UA) president and Board of Regents for the promotion of advanced study, research, economic or business development, and/or instruction in specified fields. Generally, a center or institute will serve to coordinate the participation of several academic disciplines or programs in a unified endeavor. While centers and institutes may have varied missions, they may not offer degree programs.

Alaska Center for Rural Health and Health Workforce/Alaska's Area Health Education Center (ACRHHW/AHEC)

<https://www.uaa.alaska.edu/academics/college-of-health/departments/ACRHHW/acrh-ahec/>

(907) 786-6591

The Alaska Center for Rural Health and Health Workforce oversees Alaska's Area Health Education Center (ACRHHW/AHEC) system and is housed within the College of Health. The ACRHHW/AHEC has an affiliation agreement with the School of Nursing in the College of Health and works closely with health programs across the UA system. The mission of ACRHHW/AHEC is to strengthen Alaska's primary care workforce. It achieves this mission through an industry-university partnership that improves the distribution, supply and quality of healthcare personnel in Alaska. Activities span the workforce spectrum and focus on engaging high school students into health career pathways, broadening the experience of existing health care students, and helping to retain a quality health care workforce with continuing education and professional development opportunities that address the health needs of Alaskans. ACRHHW/AHEC also conducts applied research in the realm of workforce.

The Alaska AHEC program has six regional centers hosted by Alaska Primary Care Association, Bristol Bay Area Health Corporation,

Foundation Health Partners, Ilisagvik College, Southeast Regional Resource Center, and Yukon Kuskokwim Health Corporation. In addition to partnerships with UA health programs, ACRHHW/AHEC works closely with several health associations and state agencies and participates as a core member of the Alaska Health Workforce Coalition.

Program activities include immersion experiences for potential and current health care students (both Alaskan and out-of-state), training camps for high schoolers, provision of a health care track in partnership with the ANSEP program, support to other UAA programs and industry trainers to develop and deliver Continuing Education and Professional Development training, and management of the Alaska CACHE: Clearinghouse for Alaska's Continuing Health Education (<http://www.akcache.org>) and the Health Careers in Alaska website (<https://www.uaa.alaska.edu/academics/college-of-health/departments/ACRHHW/acrh-ahec/healthcareerswebsite/index.cshml>).

Alaska Center for Conservation Science (ACCS)

accs.uaa.alaska.edu (<http://accs.uaa.alaska.edu>)
(907) 786-6350

The Alaska Center for Conservation Science is Alaska's clearinghouse for information on plant and animal species of conservation concern, natural communities of conservation concern, aquatic ecology baseline conditions, and invasive non-native plant and animal species. The center collects, validates, and distributes this information, and assists natural resource managers and others in applying it effectively. The center is part of NatureServe, and its data are linked to similar programs in all 50 states, Canadian provinces and many Latin American countries.

The center's fields of expertise include zoology, botany, aquatic ecology, vegetation and conservation planning.

The zoology program synthesizes information concerning rare and potentially endangered vertebrate species. The center conducts bird surveys, maintains a database on non-native animals and, through the U.S. Geological Survey's Gap Analysis Program, is modeling the distribution of all birds and mammals in Alaska.

The botany program conducts inventories and ecological and evolutionary research on rare plants and lichens and non-native plants of Alaska. The center synthesizes and serves data from other collaborators to the public. The center maintains one of the largest, spatially explicit non-native plant databases in the country, with over 95,000 non-native plant occurrences from Alaska and the Yukon Territory, which is used to facilitate research and early detection as well as rapid response actions.

The aquatic ecology program investigates the influences of natural and human processes on the structure and function of freshwater ecosystems. The major focus of the aquatic ecology program has been the establishment of baseline biological conditions and the development of tools to monitor the biological health of Alaska's streams.

The vegetation ecology program's main objective is to describe the major ecosystems and plant communities within the state of Alaska. Field projects include land cover mapping, describing all plant

communities and identifying those that are rare, and understanding ecosystem succession.

The conservation planning section addresses important management questions identified by land managers by developing distribution maps for key resource values, documenting potential impacts from environmental change agents, and providing baseline data for future management decisions.

In addition to serving conservation data to the public, the Alaska Center for Conservation Science also mentors, employs and provides scholarships for undergraduate and graduate students, who work on a wide array of projects.

Alaska Small Business Development Center (Alaska SBDC)

aksbdc.org (<https://aksbdc.org>)
(907) 786-7201 or toll free (800)-478-7232

The Alaska Small Business Development Center is a cooperative program of the Small Business Administration (SBA) accredited by the Association of Small Business Development Centers and hosted by UAA. The Center is housed in the Business Enterprise Institute.

The Alaska SBDC fosters, promotes and assists growth and development of small businesses in Alaska through a family of services. The Alaska SBDC provides Alaska's businesses and entrepreneurs with in-depth, high-quality business counseling and training. The Alaska SBDC helps businesses with management, marketing, sales, finance, accounting and other disciplines required for small business growth, expansion and innovation.

The Alaska SBDC is represented throughout Alaska with regional offices and corresponding satellite locations. The Alaska SBDC also focuses on business growth in rural Alaska through the Rural Outreach Program for Entrepreneurs (ROPE). Three additional programs for Alaska businesses are also available. The Procurement Technical Assistance Center (PTAC) provides support for businesses seeking opportunities in government contracting. The Buy Alaska program offers free in-state sourcing for buyers and sales referrals through a comprehensive online site (<http://www.buyalaska.com>). The Technology Research and Development Center of Alaska (TREND) provides Small Business Innovation Research (SBIR) proposal assistance and technical database searches.

All Alaska SBDC network services encourage involvement of the university within the public square and serve as a direct conduit from the University of Alaska to business communities throughout the state.

Business Enterprise Institute (BEI)

www.uaa.alaska.edu/academics/business-enterprise-institute/
(907) 786-5444

The Business Enterprise Institute (BEI) links economic development programs across the University of Alaska System and supports businesses and entrepreneurial capacities across Alaska. BEI provides a platform for high-level consultancy between industries and UAA. Providing economic development-related research and technical assistance, high-level professional education, small business

development services and economic ecosystem enhancement for Alaska, BEI serves as a bridge to expertise and talents throughout UAA.

The Business Enterprise Institute consists of the Alaska Small Business Development Center, the UA Center for Economic Development, the Alaska Procurement Technical Assistance Center, the Alaska Cooperative Development Center, the Alaska Minority Business Development Center, the Center for Corporate and Professional Development, the Applied Environmental Research Center, and the Center for Strategic Partnerships and Research.

Center for Alaska Education Policy Research (CAEPR)

<http://www.iseralaska.org/CAEPR>
(907) 786-5494
CAEPR@alaska.edu

The Center for Alaska Education Policy Research is a division of the Institute of Social and Economic Research. CAEPR addresses the need for Alaska-specific research through supporting, conducting and disseminating objective, non-partisan, rigorous research on critical issues such as: educational access; college and career readiness; teacher supply, demand and turnover; indigenous education challenges; and circumpolar education. The center's work is conducted in partnership and collaboration with faculty from across the university system, key stakeholders and policymakers, and educators in Alaska and across the North and is aimed at making research accessible to multiple audiences.

Center for Alcohol and Addiction Studies (CAAS)

<https://www.uaa.alaska.edu/academics/college-of-health/departments/institute-for-circumpolar-health-studies/>
(907) 786-6575
uaa_ichs@uaa.alaska.edu

The mission of the Center for Alcohol and Addiction Studies represents the University of Alaska's commitment to address the problem of substance use and abuse in the state. The CAAS mission is to help alleviate the problem of substance abuse and its adverse impacts through the development and implementation of education, training, research, and public service programs.

CAAS has produced local and statewide reports related to substance abuse problems in the state, received numerous grants and contracts to undertake research and evaluation studies, and initiated workshops and training programs to help practitioners enhance their skills. CAAS serves as a resource for collaborative research and as a repository of information for health researchers.

Center for Behavioral Health Research and Services (CBHRS)

<https://iseralaska.org/cbhhrs/>
(907) 786-6381
cbhrs@alaska.edu

The Center for Behavioral Health Research and Services is a research center in the Institute of Social and Economic Research that has been in existence since 1999. CBHRS' research is focused on improving the health of Alaskans through health behavior change interventions

at the individual, healthcare, community, and policy levels. CBHRS' multidisciplinary investigators, research professionals, and students include researchers, clinicians, and educators dedicated to the behavioral and physical health of all members of our community. Areas of focus include prevention of substance use disorders, fetal alcohol spectrum disorders (FASDs), and suicide; and promotion of healthy lifestyles across the lifespan. CBHRS conducts comprehensive evaluation work in these areas as well. To conduct its research and evaluation, CBHRS collaborates with diverse partners and stakeholders including community members, state and national agencies, and other universities across the country.

CBHRS is funded through a variety of mechanisms, including grants and contracts from the State of Alaska and municipal government agencies, nonprofit organizations, tribal entities, private enterprises, and federal research and health services institutes such as the Substance Abuse and Mental Health Services Administration (SAMHSA), Centers for Disease Control and Prevention (CDC), and the National Institutes of Health. CBHRS also houses the CDC-funded FASD Practice and Implementation Center and the SAMHSA-funded Screening Brief Intervention and Referral to Treatment (SBIRT) Professional Training Program.

In addition to conducting research and evaluation, CBHRS provides training and technical assistance on prevention of alcohol-exposed pregnancies, SBIRT implementation, and has expertise in process and outcome evaluation and translation of research into practice. CBHRS is approved by the American Psychological Association to offer continuing education.

Center for Community Engagement and Learning (CCEL)

www.uaa.alaska.edu/engage (<http://www.uaa.alaska.edu/engage>)
(907) 786-4062
www.facebook.com/uaaccel (<http://www.facebook.com/uaaccel>)
uaa.ccel@alaska.edu

UAA's Center for Community Engagement and Learning connects academic programs with community needs, enables the university to effectively carry out its community engagement mission, and serves as the center of engaged academic activities on the campus. It uses scholarship and action for the mutual benefit of the university, the state, its communities and its diverse peoples. The center uses proven pedagogies and high-impact educational practices to support community-engaged curriculum, community-based research projects and creative activity of students and faculty. For faculty, annual mini-grants and awards, student support, and training and technical assistance provide opportunities to develop new community partners and enhance longer-term community-engaged projects. An Urban in Alaska program engages students through a competitive application process in a leadership program for community engagement and brings faculty and community members into forums of interest and importance to the community. CCEL also has an Undergraduate Certificate in Civic Engagement, which encourages students' active engagement in civic dialogue and action for the good of the community and complements their major disciplinary focus.

Center for Economic Development (CED)

<http://www.uaa.alaska.edu/academics/business-enterprise-institute/center-for-economic-development/>
(907) 786-5458

The University of Alaska Center for Economic Development is one of nearly 60 university centers designated by the U.S. Department of Commerce Economic Development Administration (EDA). In this role, CED leverages the resources of the UA system to improve local economies and the economic development capacity of Alaska by providing technical assistance for public and private sector organizations. The Center is housed in the Business Enterprise Institute.

The ways in which the center engages in economic development are broad, flexible and guided by the needs of the university, its partners and Alaska communities. CED offers technical assistance and provides information, data and know-how to evaluate, shape and implement specific projects and programs that promote economic development, with a focus on economically distressed regions, as defined by the EDA. Current areas of emphasis include:

- Providing business and community planning, feasibility studies, and market analysis project support;
- Promoting entrepreneurial capacity building through special initiatives, workshops and courses;
- Delivering economic development courses that lead to professional designations; and
- Linking the university and organizations engaged in economic development, such as Alaska regional development organizations, Native organizations, the Denali Commission and the State of Alaska.

In addition, CED houses several other programs:

- Alaska Cooperative Development Program—organized to foster development of cooperative business enterprises in rural Alaska, and to help Alaska producers and consumers to use cooperatives to provide economic base activities that can spur economic development.
- Alaska Native American Business Enterprise Center—serving businesses in the areas of procurement, market access, capital and matchmaking; eligible businesses must be 51 percent or more minority owned and have \$1 million in revenue.
- AmeriCorps VISTA — an umbrella of volunteers in nonprofits and governments across the state working to build economic development capacity.
- AKSourceLink — a statewide collaboration of nonprofits, government and university programs combining to create a free community referral network of more than 120 resource partners.
- Lemonade Day Alaska — a youth entrepreneurship program designed to teach young people about business planning and financial literacy.

Center for Economic Education (CEE)

<https://business.uaa.alaska.edu/departments/economics-public-policy/center-for-economic-education.cshtml>
(907) 786-1916

prjohnson@alaska.edu

The Center for Economic Education is sponsored by the College of Business and Public Policy. CEE promotes and improves economics curricula throughout Alaska by sponsoring workshops and college credit courses for teachers and high school students, providing educational materials, and offering other assistance to educators and school districts.

The center is also charged with the task of helping Alaskan citizens better understand the role of economics in their lives and in the future of the state. To this end the center sponsors workshops, speakers and courses that promote economic literacy in the general public.

Additionally, CEE is focused on designing software and other classroom technologies for improving economic instruction. This includes the creation of web resources that allow teachers to simulate complex economic environments in their classrooms and provide students with a dynamic classroom experience.

Center for Human Development (CHD)

<https://www.uaa.alaska.edu/academics/college-of-health/departments/center-for-human-development/>
(907) 272-8270 or toll free (800) 243-2199
info@alaskachd.org

The Center for Human Development, a University Center for Excellence in Developmental Disabilities Education, Research and Service, is an interdisciplinary unit under the College of Health. Faculty and staff represent a variety of disciplines, including psychology, social work, special education, sociology, adult education, nursing, public health and human services. The center has a variety of projects that provide paid work experience for UAA students.

CHD is authorized under the Developmental Disabilities Assistance and Bill of Rights Act of 1999 as a Center for Excellence to build state and community capacity to respond to the needs of individuals who experience developmental and other persistent conditions requiring long-term or specialized support, and to the needs of their families. CHD serves as a liaison between the academy and the service delivery system. It collaborates with state agencies and community providers to support the independence, productivity and community integration of people who experience developmental and related disabilities by:

- Providing interdisciplinary pre-service and continuing education of students;
- Providing community service through demonstration and model services, training and technical assistance for individuals requiring long-term support, their families and support staff;
- Conducting formal and applied research, evaluation and analysis of public policy in areas affecting individuals requiring long-term support and their families; and
- Disseminating information about disabilities, long-term support and professional best practices.

Confucius Institute (CI)

<https://www.uaa.alaska.edu/academics/college-of-arts-and-sciences/programs/confucius-institute/>

(907) 786-1760
uaa_ci@alaska.edu

Sponsored by the Office of Chinese Language International Council (Hanban), the UAA Confucius Institute (UAA-CI) was established in November 2008. Housed in the College of Arts and Sciences, the institute helps to better prepare UAA students in terms of learning the Chinese language and culture.

Northeast Normal University (NENU), based in Changchun, Jilin province in China, is UAA's academic partner to further the institute's mission to promote understanding of Chinese language and culture in the communities served by the university. This partnership aims to strengthen educational and cultural cooperation between China and the United States. NENU provides trained personnel to assist the UAA-CI achieve its core mission.

To carry out Hanban's mission, the UAA-CI makes Chinese language, cultural and educational resources, and services available to the public, and promotes cross-cultural interactions and communication in the state of Alaska that is featured by cultural diversity. Through Chinese language and cultural courses, conferences and cultural events such as the summer camp program, the UAA-CI provides a variety of opportunities for UAA students, Alaska K-12 school students, and local residents to learn the Chinese language and experience the Chinese culture in China.

Environment and Natural Resources Institute (ENRI)

<https://www.uaa.alaska.edu/academics/college-of-arts-and-sciences/programs/environment-and-natural-resources-institute/>
 (907) 786-4909

The Environment and Natural Resources Institute conducts applied and fundamental scientific research and collects, synthesizes, archives and distributes natural science data, specimens and knowledge. This is accomplished by conducting field and laboratory studies, participating in data and sample archiving and synthesis activities, and providing electronic outlets and Internet portals for public access. ENRI also supports two analytical facilities: the UAA Stable Isotope Laboratory (SIL) and the Applied Science and Engineering Technology (ASET) Laboratory. These facilities are designed to serve the research, teaching and service mission of the College of Arts and Sciences and are central to advancing the integrative science theme at UAA.

ENRI is organized into two main research focus areas: natural resources and environmental health. Within each focus area, the research activities comprise multiple principal investigator-led programs.

- **Natural Resources:** ENRI continues to serve its mandated mission of providing scientific information for resource managers, policymakers, the scientific community and the general public. Data, research findings and discoveries are furnished to these user groups in order to increase the understanding of relevant natural processes and to ensure that prudent decisions regarding Alaska's natural resources are made. Researchers in the Natural Resources Research Focus Area (NR-RFA) examine the ecology and population health of biological resources and the ecological

impacts of resource extraction. ENRI faculty fellows and research scientists have active research programs in the following areas: physiological ecology; population biology of plants, animals and microbes; and ecosystem biogeochemistry and geology, with a focus on Alaska and high-latitude systems. Many of their research projects examine the effects of large-scale environmental changes such as those that accompany climate change and extractive land uses.

- **Environmental Health:** The Arctic acts as a "cold trap" and is a hemispheric sink for persistent organic pollutants (POPs), which are transported by the atmosphere through a well-documented process known as global distillation, as well as via oceanic currents from warmer regions. The Arctic has accumulated significant levels of legacy chemicals — POPs that have been banned or restricted — as well as emerging chemicals of concern. Arctic wildlife and people are also exposed to high levels of POPs from local sources such as toxic military waste and solid waste dumps. Also, people in the Arctic are exposed to longer periods and higher levels of chemicals in household dust because of more time spent indoors in sealed homes. The ENRI Environmental Health Research Focus Area (EH-RFA) studies the effects of POPs on Alaskans.

Ethics Center

www.uaa.alaska.edu/academics/college-of-arts-and-sciences/departments/philosophy/ethics-center
 (907) 786-4677

The mission of the UAA Ethics Center is to promote research and dialogue, inform debate, and engage the community on ethical issues relevant to the people of Alaska and its diverse communities. The center aims to serve the communities, businesses, professions and universities of Alaska by providing training, workshops, white papers, consultation and continuing education.

Institute for Circumpolar Health Studies (ICHS)

<https://www.uaa.alaska.edu/academics/college-of-health/departments/institute-for-circumpolar-health-studies/>
 (907) 786-6575
uaa_ichs@uaa.alaska.edu

The Institute for Circumpolar Health Studies is a health research and policy research institute that provides support, coordination, information and training for health research that serves the needs of Alaskans and other residents of the circumpolar north. Since it was created by the Alaska Legislature in 1988 (AS 14.40.088), the ICHS has been a leader in addressing a wide variety of health problems and issues facing Alaskans. Alaska's rural and multicultural environment calls for a multidisciplinary approach to defining health problems and identifying appropriate solutions. ICHS research activities include epidemiologic studies of population health problems; studies of health services need, access and utilization; and evaluation of health policy and the effectiveness of new programs.

ICHS works closely with faculty throughout the UA system, providing technical assistance and support to increase the health research capacity in Alaska through conferences, guest lectures and other teaching activities. ICHS also encourages student involvement through

internships and research assistantships. The institute maintains collaborative relations with other universities, state and federal agencies, Alaska Native health organizations, and Alaska communities to provide relevant health information, support local planning, and inform the development of health policy. Cooperative activities in research, instruction and service link Alaska and the university with international health research and practice. ICHS provides professional development and training through conferences and workshops for public health and medical professionals, and informational services and educational programs for the general public.

Institute of Social and Economic Research (ISER)

<https://iseralaska.org/>

(907) 786-7710

uaa_iser@alaska.edu

The Institute of Social and Economic Research is the state's oldest and largest public policy research organization, established by the Alaska Legislature in 1961. Today it has a staff of about 30 to 35, including faculty, research associates and support staff. ISER's faculty and research associates are multidisciplinary, analyzing social and economic change primarily in Alaska but also in other northern regions. Over the past half century ISER has examined virtually every major public policy issue in Alaska. Hundreds of studies since 1961 document effects of natural resource development—including development in the petroleum, seafood, mining, timber, and tourism industries—as well as fiscal policies of state and local governments, transportation and energy requirements of developing regions, effects of change on Alaska Native peoples, and the growth and evolution of Alaska's education system.

ISER's non-partisan research is widely used throughout the public and private sectors in Alaska, and the faculty and staff make sure research findings are disseminated broadly—through hundreds of online reports and other information on ISER's website; through electronic mailing lists that notify Alaskans and others about new research findings and public talks at ISER; through presentations to a wide range of public and private groups inside and outside the state; through seminars, workshops, and conferences; through testimony to the Alaska Legislature and other government bodies; and through interviews with the press.

ISER is part of the College of Business and Public Policy (CBPP). ISER faculty teach in CBPP as well as other UAA colleges, and the institute provides opportunities for student involvement through internships and research assistantships. ISER also forms research partnerships with other universities, Alaska Native organizations, school districts and community groups.

Justice Center

<https://www.uaa.alaska.edu/academics/college-of-health/departments/justice-center/>

(907) 786-1810

uaa.justice@alaska.edu

The UAA Justice Center, established by the Alaska Legislature in 1975, has a mandate to provide statewide justice-related education, research and service. The center is an interdisciplinary unit that provides undergraduate, graduate and professional education; conducts

research in the areas of crime, law and justice; and provides service to government units, justice agencies and community organizations throughout urban and rural Alaska to promote a safe, healthy and just society.

Through its work, the center promotes understanding of the justice system throughout rural and urban Alaska.

The Justice Center offers courses in the areas of crime, delinquency, legal studies, and police, judicial and correctional policy and administration. Students may choose from among seven academic credentials: a baccalaureate degree or minor in justice, or one of five legal studies certificate and degree programs approved by the American Bar Association. Two honor options are also available to students: Justice Honors for those undergraduate students who develop exceptional social science research skills and Pro Bono Service Honors for students who volunteer significant time with legal aid organizations.

The Justice Center conducts research in the areas of crime, law, law enforcement, corrections and the administration of both civil and criminal justice. This research contributes to the development of the UAA academic curriculum and serves as the underpinning for center work in community education and public service. Since its establishment, the center has been particularly committed to research on cross-cultural issues as a means for improving Alaska justice administration and for broadening education opportunities for the Alaska Native community.

The Justice Center includes the Alaska Justice Statistical Analysis Center (AJSAC), a program under the aegis of the Bureau of Justice Statistics. The AJSAC assists Alaska criminal justice agencies, as well as state and local governments and officials, with the development, implementation, and evaluation of criminal justice programs and policies through the collection, analysis, and reporting of crime and justice statistics. It is a member of the Justice Research and Statistics Association, a national nonprofit organization dedicated to policy-oriented research and analysis. The Justice Center also includes the Alaska Justice Information Center (AJiC). The mission of AJiC is to compile, analyze, and report on criminal justice topics to policymakers and practitioners in order to improve public safety, to increase criminal justice accountability, and to reduce recidivism.

Justice Center products include books, papers, reports and presentations for practitioners and policymakers. Justice Center faculty and staff provide legislators and other public officials with assistance in the organization and preparation of materials for public policy formulation. In addition, center-sponsored events and a quarterly research publication, the Alaska Justice Forum, permit the exchange of ideas on justice and legal issues in Alaska.

Montgomery Dickson Center for Japanese Language and Culture

<https://www.uaa.alaska.edu/academics/college-of-arts-and-sciences/programs/montgomery-dickson-center/>

(907)786-4038

[www.facebook.com/](http://www.facebook.com/uaaaccel) (<http://www.facebook.com/uaaaccel>)MDCJLC

(<http://www.facebook.com/MDCJLC>)

The Montgomery Dickson Center for Japanese Language and Culture is committed to developing Japanese language education at UAA and throughout Alaska, as well as to promoting mutual understanding between the U.S. and Japan in honor of UAA alumnus Montgomery Dickson, who perished in the 2011 Tohoku Great Earthquake and Tsunami in Japan. The center is housed in the College of Arts and Sciences.

The center's mission is to assist with UAA's ambition to further enrich and deepen mutual understanding and appreciation between Japan and Alaska by providing high-quality Japanese language education at UAA. The center's main objectives are to encourage, complement and expand Japanese language instruction within UAA and throughout the state of Alaska; to provide opportunities for Alaskans to experience, appreciate, understand and enjoy high-quality, significant and culturally meaningful Japanese programs and events; and to serve as a locus within the university for facilitating student and faculty exchanges, programmatic collaborations, and enhanced cooperation between Alaska and Japan.

Psychological Services Center (PSC)

www.uaa.alaska.edu/academics/college-of-arts-and-sciences/departments/psychology/psychological-services-center (<http://www.uaa.alaska.edu/academics/college-of-arts-and-sciences/departments/psychology/psychological-services-center/index.cshhtml>) (907) 786-1795

The Psychological Services Center is the UAA on-campus training clinic for graduate students in the MS Clinical Psychology program and the joint Ph.D. in Clinical-Community Psychology with a Rural and Indigenous Emphasis. Student trainees at the PSC provide a range of psychological services under supervision by licensed psychologists. Services are available at affordable, low fees and on a sliding fee scale. The clinic is open to students and to members of the community.

Therapy and assessment services are provided in a confidential atmosphere sensitive to diversity and with respect for the individual. Individual, group, family and child therapy are offered for a range of needs, from exploration of one's potential to anxiety, depression, stress, loss, test anxiety and relationship difficulties. Because the PSC is a training clinic that is closed on weekends, holidays and school breaks, it is not a resource for individuals seeking help for an immediate severe crisis. For an appointment or information, please call (907) 786-1795.

Campus Life

Surrounded by urban life and wilderness, the University of Alaska Anchorage (UAA) is a gateway to innovative thinking, learning and exploration. UAA is the state's largest university, located at the heart of the state's largest city of Anchorage. Community campuses are located in Kodiak, Mat-Su, Soldotna and Valdez. Students at UAA come from Alaska's towns, cities and rural communities; from all 50 states and U.S. territories; and over 30 countries. Our communities embrace the cultures, ethnicities, politics, experiences and goals of a diverse group of people, united by respect for others and commitment to education.

Involvement in campus life fosters the development of leadership skills, a sense of belonging and opportunities to contribute to the community. Through our many programs and activities, UAA students experience

hands-on education, in and out of the classroom. We encourage students to explore the array of resources and activities available to them through living on campus (Anchorage/Kenai/Valdez) and participating in clubs and organizations, student government, social and recreational activities, community service, recreational sports, and athletics.

Information about campus life at UAA's campuses can be found on the following websites:

- UAA Anchorage (<https://www.uaa.alaska.edu/students/student-life-leadership>)
- Kenai Peninsula College (http://www.kpc.alaska.edu/student_life)
- Kodiak College (<http://www.koc.alaska.edu>)
- Matanuska-Susitna College (<http://matsu.alaska.edu/future-students/explore-msc>)
- Prince William Sound College (<http://pwsc.alaska.edu>) (http://catalog.uaa.alaska.edu/aboutuniversity/campuslife/%20http://www.kpc.alaska.edu/student_life)

Academic Policies and Processes

It is the responsibility of the individual student to become familiar with the policies and regulations of the University of Alaska Anchorage printed in this catalog. The responsibility for meeting all graduation requirements rests with the student. Every effort is made to ensure the accuracy of the information contained in this catalog; however, the University of Alaska Anchorage Catalog is not a contract but rather a guide for the convenience of students. The university reserves the right to change or withdraw courses; to change the fees, rules and calendar for admission, registration, instruction and graduation; and to change other regulations affecting the student body at any time. The University of Alaska Anchorage includes the units of Anchorage, Kenai, Kodiak, Matanuska-Susitna and Prince William Sound.

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Academic Standards and Regulations

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Academic Petition

Deviations from degree requirements must be approved by academic petition. Petition forms may be obtained online (<https://www.uaa.alaska.edu/students/registrar/registrarforms.cshhtml>).

All petitions requesting that transferred elective credit be accepted for degree requirements must be accompanied by catalog copy of

the course description(s) from the institution of origin. It is highly recommended to include a course syllabus in the documentation. Petitioned courses, other than those from UAF or UAS, must meet transfer credit criteria for acceptance prior to final approval.

Final authority to approve or deny petitions pertaining to program or college requirements rests with the dean of the college. Petitions pertaining to General Education Requirements (GERs), General Course Requirements (GCRs) and/or General University Requirements (GURs) must, in addition, be processed through the Office of Academic Affairs, with final authority to approve or deny resting with the provost. Students and the department will be notified of the decision.

Changes in course level, grading or number of credits awarded cannot be petitioned. UAA courses not on the approved baccalaureate GER list (p. 86) cannot be petitioned to meet a GER.

Academic Rights of Students

The university has the responsibility of providing a program of high-quality education in keeping with its financial resources; students have protection through campus-specific procedures against arbitrary or capricious academic evaluation. Student performance shall be evaluated solely on an academic basis, not on opinions or conduct in matters unrelated to academic standards. Students are responsible for completion of their academic program, for familiarity with all requirements of the university catalog and for maintaining an acceptable grade point average for degree requirements. Students have the right to be informed at the beginning of each term of the nature of the course, course expectations, evaluation standards and the grading system.

Academic Honesty

Academic integrity is a basic principle that requires students to take credit only for ideas and efforts that are their own. Cheating, plagiarism and other forms of academic dishonesty are defined in the Student Code of Conduct (<http://catalog.uaa.alaska.edu/handbook/student-freedoms-rights-and-responsibilities/student-code-of-conduct>). Cheating, plagiarism and other forms of academic dishonesty will first go through the student conduct process and then, if a violation of the Student Code of Conduct is found, academic sanctions may occur in addition to disciplinary sanctions. The Student Conduct Review Procedures (<http://catalog.uaa.alaska.edu/handbook/student-freedoms-rights-and-responsibilities/student-code-of-conduct>) are outlined in the UAA Student Handbook (<http://catalog.uaa.alaska.edu/handbook>).

Academic Dispute Resolution Procedure

Challenges to academic decisions or actions of the faculty or academic administration will be reviewed according to the procedure that implements the UA Board of Regents Policy (<http://www.alaska.edu/bor/policy-regulations>) 09.03.024 and its University Regulation on Student Dispute Resolution: Review of Academic Decisions or Actions. Appropriate issues for this procedure include such things as alleged grading error or arbitrary or capricious assignment of final grades or dismissal from or denial of admission to an academic program based upon academic considerations. Academic decisions based on alleged violations of the Student Code of Conduct (<http://catalog.uaa.alaska.edu/handbook/student-freedoms-rights-and-responsibilities/student-code-of-conduct>) are outlined in the UAA Student Handbook (<http://catalog.uaa.alaska.edu/handbook>).

responsibilities/student-code-of-conduct) will not be reviewed under this procedure until the Student Conduct Review Procedures are exhausted.

Definitions

Academic Decision Review Committee - An academic decision review committee is an ad hoc committee that formally reviews a contested final grade assignment, dismissal from or denial of admission to an academic program based upon academic considerations or other academic decision. The committee will be composed of three faculty members, one of whom must be from outside the college/community campus delivering the course or program, a non-voting committee chair who may be a faculty member, and a non-voting student representative. To be eligible, the non-voting student representative must be currently enrolled in at least three credits, in good disciplinary standing and have a cumulative grade point average of 3.0 or higher. The dean of the college/community campus director will appoint committee members. If the academic decision being challenged is for a graduate course or program, the faculty appointed will be from those departments with graduate programs, and the student committee member will be a graduate student.

Dean/Community Campus Director - The dean is the administrative head of the college offering the course or program from which the academic decision or action arises. For students at community campuses or taking a course from a community campus, the director of the community campus may substitute for the dean in the case that the relevant course or program is delivered by that community campus.

This definition includes the designee of either the dean or community campus director.

Arbitrary or Capricious Academic Decision - An academic decision is "arbitrary or capricious" when: 1) it is not based on academic factors or criteria or accepted standards of the discipline or profession; 2) standards are not equally or fairly applied to students in relevantly similar situations; and 3) there is a substantial, unreasonable, or unannounced departure from articulated standards or criteria.

Arbitrary or Capricious Grading - An academic final grading decision is "arbitrary or capricious" when: 1) the assignment of a final course grade is on a basis other than academic performance in the course; 2) the instructor uses standards different from those applied to other students in the same section of the course; or 3) there is a substantial, unreasonable and/or unannounced departure from the course instructor's previously articulated standards or criteria (see also Grading Error).

Class Day - As used in the schedule for review of academic decisions, a class day is any day of scheduled instruction, excluding Saturday and Sunday, included on the academic calendar in effect at the time of a review. Final examination periods are counted as class days.

Final Grade - The final grade is the grade assigned for a course upon its completion.

Grading Error - A grading error is a mathematical miscalculation of a final grade or an inaccurate recording of the final grade (see also Arbitrary or Capricious Grading).

Next Regular Semester - The next regular semester is the fall or spring semester following the semester in which the disputed academic decision was made. For example, it would be the fall semester for a final grade issued for a course completed during the previous spring semester or summer session. The spring semester is the next regular semester for an academic decision made during the previous fall semester.

Procedures for Resolving Disputes Regarding Final Grade Assignment

Students may request a review of a final grade assignment on the basis of alleged grading error or arbitrary or capricious grading. Grades assigned prior to the final grade received in a course are not subject to review under this procedure. Only the course instructor or an academic decision review committee may authorize a change in the assignment of a final grade. Because grades can affect such things as a student's eligibility for continued financial aid, students should check their final grades and initiate a review, where desired, as soon as possible. The time schedule outlined in this procedure stipulates maximum time periods within which to complete stages of the review. However, permission for extensions of time may be granted, in writing, by the dean/community campus director.

Each college and community campus has designated an individual to explain the academic review process to students. The names and contact information for these individuals are posted on the college/community campus website. Students are encouraged to reach out to these individuals for assistance.

Informal Procedure for Academic Disputes Regarding Final Grade Assignment

Students will be expected to first request an informal resolution of the final grade assignment with the course instructor. The process must be initiated by the fifteenth class day of the next regular semester at UAA. The instructor must respond to the request within five class days of receipt.

If the course instructor's decision is to change the final grade, the instructor must promptly initiate the process. If the instructor does not change the grade and the student's concerns remain unresolved, the student may notify the department chair/academic leader responsible for the course. Within five class days of such notification, the department chair/academic leader must either effect resolution of the issue with the instructor or inform the student of the process for requesting a formal review of the final grade assignment.

If the course instructor is no longer an employee of the university or is otherwise unavailable, the student must notify the department chair/academic leader of their request for informal resolution of the final grade assignment by the fifteenth class day of the next regular semester. Within five class days of notification by the student, the department

chair/academic leader must either effect resolution of the issue through contact with the course instructor or inform the student of the process for requesting a formal review of the final grade assignment.

Formal Procedure for Academic Disputes Regarding Final Grade Assignment

If the student's concern remains unresolved through the informal procedures above, the student may request a formal review of the final course grade assignment. A student formally requesting a review of a final grade assignment must submit to the dean/community campus director: a completed and signed request for formal review form, an explanation of the basis for requesting a change of grade, and supporting documentation. The request must be filed by the twentieth class day of the next regular semester or within five class days of receipt of notification of the process for filing a request for a formal review by the department chair/academic leader after completion of an informal review. The only exception will be when written permission for an extension of time is granted by the dean/community campus director.

After establishing that informal procedures have been followed, that the request for formal review falls within the required deadlines, and that this is the first request for formal review of this issue, the dean/community campus director will convene an academic decision review committee and forward to it the completed and signed request for formal review form, the explanation of the basis for requesting a change of grade, and supporting documentation from the student. The committee chair will convene the committee within ten class days of receipt of the student's written request for review. The committee will first consider whether the facts submitted by the student warrant a formal review meeting.

The committee may dismiss the student's request without conducting a formal review meeting if the facts as presented clearly do not constitute a case of arbitrary or capricious grading or grading error. This decision will constitute the final decision of the university. The committee's decision will be provided in writing by the committee chair to the student, the course instructor, the department chair/academic leader, and the dean/community campus director. The dean/community campus director will maintain the decision letter, along with the documents submitted by the student and will send a copy of the decision letter to the provost.

Academic Decision Formal Review Meeting

If the academic decision review committee determines that the facts as presented might constitute arbitrary or capricious grading or a grading error, the committee will proceed to a formal meeting. The committee will consider information provided by the student, the course instructor, and others as it sees fit. Both the student and the instructor will have an opportunity to present the facts as they understand them.

Formal review meetings will ordinarily be scheduled between five and ten days after the academic decision review committee determines that a formal review is warranted. The student and the course instructor must be notified in writing at least three class days in advance of the

time and place the request will be considered and of the process to be followed. Formal review meetings will normally be closed. Requests for an open proceeding must be made by a party to the committee chair prior to the start of the meeting. Such requests will be granted to the extent allowed by law unless the committee chair determines that all or part of a proceeding should be closed based upon considerations of fairness, justice, and other relevant factors.

The university cannot guarantee confidentiality, however, as a reasonable effort to preserve the legitimate privacy interests of the persons involved, all participants in the proceedings will be expected to maintain confidentiality.

A party may choose a supporter to be present at all times during the proceedings. However, the supporter may not speak on behalf of the party. The committee may direct that witnesses, but not the parties or their supporters, be excluded from the meeting except during their testimony. Should the student or instructor fail to appear at the formal review meeting, the meeting may proceed in their absence. The student or instructor may submit a written statement, if they cannot attend the meeting.

The deliberations of the committee will be closed to the public, the parties, and their advisors.

Academic Decision Review Committee Decision

The academic decision review committee proceedings will result in one of the following determinations for reviews of final grade assignments:

- the request for a grade change is denied;
- the request for a grade change is upheld and the committee requests the course instructor to change the grade and the course instructor changes the grade; or
- the request for a grade change is upheld and the course instructor is either unavailable to change the grade or refuses to do so. The committee directs the dean/community campus director to initiate the process to change the grade to that specified by the review committee.

The decision of the review committee constitutes the final decision of the university. The committee chair will provide the decision in writing to the student, the course instructor, the department chair/academic leader and the dean/community campus director. The meeting will be recorded and the committee chair will be responsible for the preparation of a written record of the meeting and will submit it to the dean/community campus director. The dean/community campus director will maintain the decision letter and the written record of the meeting, and will send a copy of the decision letter to the provost.

Unless an extension has been granted by the dean/community campus director, disputes concerning final grades must be completed by the end of the next regular semester following the assignment of the final grade.

Procedures for Resolving Disputes Regarding Denial of Admission to or Dismissal from a Program of Study for Academic Reasons

Students may challenge a denial of admissions to, or dismissal from, a program of study for academic reasons on the basis that the academic decision was arbitrary or capricious. Students will be expected to first request an informal resolution with the department chair/academic leader regarding denial of admission to or dismissal from a program of study for academic reasons. The process must be initiated by the fifteenth class day of the next regular semester. The department chair/academic leader must respond to the request within five class days of receipt, and, if there is not a resolution of the issue, inform the student of the process for filing a request for formal review.

If the student's concern remains unresolved through the informal procedures above, the student may request a formal review of a denial of admission to or dismissal from a program for academic reasons. The student must provide the dean/community campus director a signed, written request for a formal review, indicating the basis for requesting a review. The request must be filed by the twentieth class day of the next regular semester, or within five class days of receipt of notification of the process for filing a request for formal review after completion of any informal review. The only exception will be when written permission for an extension of time is granted by the dean/community campus director.

An academic decision review committee will conduct a formal review meeting for academic decisions regarding denial of admission to or dismissal from a program for academic reasons. The committee will consider information provided by the student, the department chair/academic leader and others as it sees fit. The process will follow the same timelines and procedures for academic disputes regarding final grade assignment with the following exceptions:

1. The chair will submit the written findings and recommendations of the academic decision review committee along with the written record of the meeting to the dean/community campus director for his/her consideration. At the same time a copy of the findings and recommendations will be provided to the student.
2. The student will be given an opportunity to comment on the findings and recommendations of the committee. The student must submit written comments to the dean/community campus director within seven class days of the day the committee findings and recommendations are sent to the student.
3. The dean/community campus director will review the written findings and recommendations of the academic decision review committee, the record of the formal review meeting and any written comments submitted by the student and make a decision. The dean's/community campus director's decision will constitute the final decision of the university on the matter and will be provided, in writing, to the student, the department chair/academic leader and the committee. The dean/community campus director will maintain the decision letter and written record of the meeting, and will send a copy of the decision letter to the provost.
4. The provost will make the final decision of the university on the matter if the dean/community campus director is the person who made the academic decision under review.

Unless an extension has been granted by the dean/community campus director, final decisions must be completed by the end of the next regular semester following the date of the denial of admission to or dismissal from a program for academic reasons.

Other Academic Decisions

Students with concerns relating to other academic decisions should refer to the dean/community campus director of the academic unit that delivers the course or program.

Disputes regarding decisions associated with appropriate academic adjustments and programmatic accommodation for students with disabilities will be reviewed according to procedures set forth in University Regulation 09.06.050 (<http://www.alaska.edu/bor/policy/09-06.pdf>) Services for Students with Disabilities.

Eligibility for Services Pending Final Decision in the Academic Decision Review Process

During the review of an academic action or decision by the university, the action or decision being contested will remain in effect until the dispute is resolved. If an academic action or decision affects the student's eligibility for financial aid, housing, or other university service, the student will be informed by the dean/community campus director of the steps to be taken that may maintain or reinstate the affected service. The student will be responsible for initiating any necessary actions or procedures.

Academic Standing

Good Standing

Undergraduate students are in good standing when they have a UAA cumulative grade point average (GPA) of 2.00 or higher and a semester GPA of 2.00 or higher for the most recently completed semester. Individual departments may establish additional criteria for good standing. Students are presumed to be in good standing during their first semester at UAA. Students in good standing are academically eligible to re-enroll at UAA.

Academic Action

Admitted certificate, associate, or baccalaureate degree-seeking students who fail to earn a UAA semester and/or cumulative GPA of 2.00 will be subject to academic action. Academic action may result in warning, probation, continuing probation or loss of certificate or undergraduate degree-seeking status. Individual departments may establish additional criteria for departmental academic action. Failure to meet or maintain these criteria may result in departmental probation or removal from a major program.

Warning

Academic warning is the status assigned to those students whose semester GPA falls below 2.00 but whose cumulative GPA is 2.00 or higher.

Probation

Placed on probation is the status assigned to those students whose semester and cumulative GPA falls below 2.00.

Continuing Probation

Continuing probation is the status assigned to those students who begin a semester on probation and during that semester earn a semester GPA of 2.00 or higher without raising their cumulative GPA to 2.00. This status may be continued until the student raises their cumulative GPA to 2.00 or loses their certificate or undergraduate degree-seeking status.

Academic Disqualification

Academic disqualification is the status assigned to those students who begin a semester on probation or continuing probation and fail to earn a semester GPA of 2.00 or higher. Those students' admission status will be changed to inactive and he or she will not be allowed to attend UAA for one academic (fall or spring) semester, including summer term if applicable. After non-attendance for either fall or spring semester, the student may complete the process for reinstatement.

Reinstatement

An academically disqualified student may submit a request for reinstatement after not attending the University of Alaska Anchorage for one academic (fall or spring) semester. The student should complete a form for reinstatement that includes a plan for academic success. This form must be reviewed and approved by an academic advisor. Completed reinstatement forms must be submitted to the Office of the Registrar at least 4 weeks prior to the first day of the semester for which a student wishes to be reinstated. An academically disqualified student must successfully be reinstated within two years of disqualification or he or she will need to reapply for admission.

If reinstatement is granted, the student will remain on probation and be required to meet with an advisor prior to registering for classes until their cumulative GPA is 2.0 or above. Students must achieve a semester GPA of 2.0 or above for each term. Students who are reinstated who do not achieve a semester GPA of 2.0 or above will again be disqualified and will not be allowed to attend UAA for one academic year.

Departmental Probation or Removal from a Major Program

Individual departments may establish additional criteria for departmental academic action. Failure to meet or maintain these criteria may result in departmental probation or removal from a major program. Those students' major program will be changed to undeclared. Students will remain in a certificate or undergraduate degree-seeking status as long as the university's minimum academic standards are met. Undeclared students must use the Change of Major Form and process to request re-admission or admission to a new program. Forms are available online on the Office of the Registrar website.

Academic Eligibility for Student Activities

Students with satisfactory academic performance are eligible for participation in intercollegiate competition or co-curricular activities. Students may not participate in intercollegiate competition or co-curricular activities or student employment if their cumulative GPA falls below 2.00 (C). Additional and higher academic standards may be required by certain specific activities. Students are advised to keep their participation in activities outside the classroom within limits that will allow them to achieve satisfactory academic performance.

Honors Lists

Admitted undergraduate degree/certificate-seeking students maintaining exceptional academic achievement are recognized after the fall, spring or summer semesters on the Dean's List and the Chancellor's List. Names of students on the Dean's List and the Chancellor's List will be released unless a student places a directory hold on their record.

Dean's List

To be eligible for the Dean's List, a student must be an admitted undergraduate degree/certificate-seeking student enrolled in at least 12 UAA credits graded with academic letter grades and must have earned a GPA of at least 3.50 for the semester. Regardless of the number of credits a student is enrolled in, a NB (no basis) grade or temporary grades of I (incomplete) or DF (deferred) will prevent a student from being eligible for the Dean's List.

Chancellor's List

To be eligible for the Chancellor's List, a student must be an admitted undergraduate degree/certificate-seeking student enrolled in at least 12 UAA credits graded with academic letter grades and must have earned a GPA of 4.00 for the semester. Regardless of the number of credits a student is enrolled in, a NB (no basis) grade or temporary grades of I (incomplete) or DF (deferred) will prevent a student from being eligible for the Chancellor's List.

Catalog Year

Each student's year of acceptance is established when the student is formally admitted into a certificate or degree program as a major or pre-major. A student's year of acceptance is adjusted if the student formally postpones admission, executes a change of major or reapplies after formal admission expires.

Certificates and Associate Degrees

Students may elect to graduate under the requirements of any catalog in effect during the five years after formal acceptance to a certificate or associate degree program.

If the requirements for a certificate or associate degree are not met within five years of formal acceptance into the program, admission expires and the student must reapply for admission.

Baccalaureate Degrees

Students may elect to graduate under the requirements of any catalog in effect during the seven years after formal acceptance to a baccalaureate degree program. However, a course satisfying a particular General

Education Requirement (GER) in the semester in which it was completed will continue to satisfy that GER for that student even if its status has changed in the catalog under which the student graduates.

If the requirements for a baccalaureate degree are not met within seven years of formal acceptance into the program, admission expires and the student must reapply for admission.

Class Standing

Class standing is an administrative classification and does not necessarily reflect progress toward completion of a degree. Class standing is based on total credits earned and is used for determining priority registration. Undergraduate degree-seeking students are classified as follows:

Class Standing	Credits
Freshman/First Year	0-29
Sophomore/Second Year	30-59
Junior	60-89
Senior	90+

Transfer students will be assigned class standing based on the number of credits accepted in transfer by the university. Non-degree-seeking students are not assigned a class standing.

Course Information

Contact Hours

UAA academic policy has established the following minimum contact times. Most lecture/discussion courses require a minimum of 750 minutes of contact time and a minimum of 1,500 minutes of course-related work completed outside the classroom to award 1 credit. Some courses require more than 750 minutes of contact time and more than 1,500 minutes of course-related work completed outside the classroom.

One contact hour is defined as 50 minutes of contact time per week in a 15-week semester.

Courses may not be offered for more than 1 credit each week.

One continuing education unit (CEU) may be granted for satisfactory completion of 10 contact hours of classroom instruction or for 20 contact hours of laboratory or clinical instruction.

Alternative learning modes are subject to the instructional objectives and outcomes of comparable, traditionally taught courses, but contact hour standards may differ.

Contact hours are expressed in the course descriptions of individual courses by the expression of “x+y” where the x equals the course’s lecture contact hours per week and the y equals the course’s lab contact hours per week. Contact hours are calculated based on a 15-week semester. All courses must meet for 15x + 15y contact hours regardless of the number of weeks in which the course is offered.

Course Numbering System

Each course offered by the university is defined by the subject designator, a campus designator, and a three-digit course number. The subject designator commonly abbreviates the name of the discipline or department (for example, COMM for Communication). In general, the first numeral of the three-digit course number indicates the year in which the course is ordinarily taken. For example, COMM A111 is ordinarily taken by first-year students and COMM A305 is taken by third-year students.

Advances in course level (lower, upper and graduate) correlate with sophistication of academic work. It should be noted that some students find introductory courses more demanding than advanced, specialized courses. In such courses, a more comprehensive approach and the first exposure to new ways of thinking may be harder for some individuals than covering a smaller, more familiar area in much greater detail.

The following definitions describe the types of courses that can be expected at each level:

Noncredit Courses

A001–A049: Noncredit courses. Offered as career development, continuing education or community interest instruction. Not applicable to any degree or certificate requirements (even by petition). They have no regular tuition but do have other special fees.

AC001–AC049: Continuing education unit (CEU) courses. CEUs are awarded upon completion of a course of study that is intended for career development or personal enrichment. CEU courses may not be used in degree or certificate programs or be converted to academic credit (even by petition). The number of CEUs awarded is related to the amount of time required to master the material presented, with one CEU typically awarded for 10 hours of active participation in a directed learning environment with an instructor available, or for 20 hours of laboratory or experiential learning where the student’s investigation and discovery is largely independent. The number of CEUs awarded is determined by the chief academic officer (dean or director) of the offering unit. Fractional CEUs may be awarded.

Preparatory/Developmental Courses

A050–A099: Courses with these numbers provide basic or supplemental preparation for introductory college courses. They are not applicable to certificates or associate, baccalaureate or graduate degrees, even by petition.

Academic Credit Courses

Courses with the following numbers count toward undergraduate and graduate degrees and certificates as described below. Each course includes a component for evaluation of student performance. Student effort is indicated by credit hours. One credit hour represents three hours of student work per week for a 15-week semester (e.g., one class-hour of lecture and two hours of study or three class-hours of laboratory) for a minimum of 750 minutes of total student engagement, which may include examination periods. Equivalencies to this standard may be approved by the chief academic officer of the university or community college.

The numbering sequence signifies increasing sophistication in a student's ability to extract, summarize, evaluate and apply relevant class material. Students are expected to demonstrate learning skills commensurate with the appropriate course level and to meet prerequisites for all courses as listed within the course descriptions. Academic credit courses are numbered as follows:

Lower-Division Courses

Lower-division courses are usually taken by freshmen and sophomores.

A100–A199: Freshman-level, lower-division courses. Introduce a field of knowledge and/or develop basic skills. These are usually foundation or survey courses. Applicable to certificates, associate degrees and baccalaureate degrees in accordance with certificate and degree requirements.

A200–A299: Sophomore-level, lower-division courses provide more depth than 100-level courses and/or build upon 100-level courses. These courses may connect foundation or survey courses with advanced work in a given field, require previous college experiences or develop advanced skills. Applicable to certificates, associate degrees and baccalaureate degrees.

Upper-Division Courses

Upper-division courses are usually taken by juniors and seniors. Upper-division courses require a background in the discipline recognized through course prerequisites, junior or senior standing, or competency requirements. These courses demand well-developed writing skills, research capabilities and/or mastery of tools and methods of the discipline.

A300–A399: Junior-level, upper-division courses build upon previous coursework and require familiarity with the concepts, methods and vocabulary of a discipline. They are applicable to baccalaureate degrees and may be applicable to associate degrees in accordance with degree requirements. These courses are not applicable to graduate degree requirements.

A400–A499: Senior-level, upper-division courses require the ability to analyze, synthesize, compare and contrast, research, create, innovate, develop, elaborate, transform, and/or apply course material to solving complex problems, and generally require a substantial background of study in lower-level courses.

These courses are applicable to baccalaureate degrees in accordance with degree requirements. These courses may be applied to graduate requirements for some master's degrees with prior approval of the student's graduate study committee. However, a student may not apply a course to both a baccalaureate and a master's degree.

Transfer Courses

A1_–A4_: UAA awards credit in all General Education Requirement (GER) areas for courses that do not match specific course descriptions but meet the learning outcomes of each area's definition, e.g., A1W fulfills the 100-level Written Communication Skills GER. The last letter(s) on a transfer course number (A#_) identifies the GER category it fulfills.

F	Fine Arts
H	Humanities
IC	Integrative Capstone
N	Natural Sciences Lecture only
NL	Natural Sciences Lab only
NS	Natural Sciences Lecture/Lab
O	Oral Communication Skills
Q	Quantitative Skills
S	Social Sciences
W	Written Communication Skills
Y	Fine Arts and/or Humanities
Z	Social Sciences or Humanities

Courses transferred in that do not have a direct equivalency and do not meet the general education learning outcomes for a specific GER area are assigned as departmental electives with indication of level and subject, e.g. WRTG A2 Departmental Elective.

Graduate-Level Courses

A600–A699: Graduate-level courses require a background in the discipline and an ability to contribute to written and oral discourse on advanced topics in the field at a level beyond that required by a bachelor's degree.

These courses demand rigorous analysis, synthesis and research skills, and require the ability to read, interpret and evaluate primary literature in the field. Students analyze raw data, evaluate models used in research and draw independent conclusions. Preparation includes demonstrated accomplishment in a specific course or discipline, or completion of a significant and related program of study. Student activities are often self-directed and aimed not only at the formation of supportable conclusions but also at a clear understanding of the process used in those formations.

These courses are applicable to post-baccalaureate and graduate certificates, and master's and doctoral degrees in accordance with degree requirements. With prior approval of the major department, they may be used to meet degree or graduation requirements for some baccalaureate degrees, but a student may not apply a course to both a baccalaureate and a graduate degree.

Professional Development Courses

A500–A599: Courses with these numbers are designed to provide continuing education for professionals at a post-baccalaureate level. These courses are not applicable to university degree or certificate program requirements, are not interchangeable with credit courses, and may not be delivered simultaneously (stacked) with academic credit courses of similar content (even by petition).

These courses may be graded pass/no pass or, if the course includes an evaluation component, letter grading. The measurement of student effort is indicated by professional development credits. Each professional development credit awarded requires at least 12.5 hours of student engagement in a directed-learning environment under the supervision of a qualified instructor. These courses are provided on a self-support basis.

Course Number Second and Third Digits

The following second and third digits of course numbers are used for specific types of academic courses:

-90	selected topics
-92	seminars and workshops
-93	special topics courses, to be offered only once
-94	trial (experimental) courses intended to become permanent
-95	internships, practica, community-based learning or cooperative education
-97	independent studies
-98	individual research courses
-99	thesis courses

Prerequisites

Students are expected to meet prerequisites for all courses. Prerequisites are listed with the course description and indicate the preparation and/or background necessary to undertake academic study. Unless otherwise noted, a passing grade (A, B, C, D, CR or P) is required in order to satisfy the prerequisite. If a student has not met the necessary prerequisites, the student may request permission from the instructor of the course to enroll in the class. It is the responsibility of the department to enter the appropriate override codes that will allow the student to register. A faculty member may withdraw students who enroll without prerequisites or faculty permission.

Corequisites

Corequisites are courses that must be taken concurrently. Students are responsible for enrolling in and attending all corequisite courses in the same semester. Corequisites are listed in the individual course descriptions. A faculty member may withdraw students for not enrolling in the appropriate corequisite(s).

Repeatable Courses

Some courses, such as special topics, may be taken more than once for additional credit. Only courses explicitly noted as repeatable for additional credit in the course description qualify for this option.

Retaking Courses

Any course for which a student has received a transcripted grade may be retaken at the student's discretion if the course is available and if permitted by the program offering the course. The student's transcript will reflect all grades earned by the student in each semester in which the course is taken. Only the last chronological grade and credit(s) earned are applied toward graduation requirements, prerequisite fulfillment and the cumulative UAA grade point average (GPA). Courses for which a student has already received a passing grade may not be eligible for financial aid.

The credit/no-credit grading option cannot be selected when courses are being retaken for GPA improvement. Students may not retake a course through credit-by-examination, correspondence or through work

at another college or university for the purpose of raising their GPA at UAA.

To determine eligibility for graduation with honors, all credits and grades from retaken courses are included in GPA calculations.

Registration Restrictions

In addition to prerequisites, registration restrictions are conditions a student must meet before enrolling in a course. Examples include, but are not limited to, admission requirements, special approval, level requirements, and special licenses or credentials.

Special Notes

In addition to prerequisites and registration restrictions, special notes may describe other qualities and expectations about the course that may impact student success. Special notes include, but are not limited to, additional information about the academic environment, degree planning or repeatability options.

Special Courses

Directed Study

A directed study course is a permanent catalog course delivered on an individual basis when the course is not offered that semester. A directed study requires the approval of the department concerned and final approval by the dean/director.

The policies are as follows:

- Retroactive registration is not permitted.
- Directed Study Forms incorrectly completed will not be processed.
- Courses scheduled for less than a full semester may not be offered for more than 1 credit each week.
- For fall and spring semesters, the deadline for directed study registration is the end of the ninth week.
- For the summer semester, the deadline for directed study registration is the end of the seventh week of the 10-week session.
- There can be no change in the basic content of the course. In particular, this means the number, level, prefix, description, title, grading policy (A-F, P/NP), credits and course content cannot differ from the permanent course.
- Only regular (tenure track or term) faculty are allowed to supervise or to be the instructor of record for directed study courses. The dean or director may function as instructor of record when no regular faculty is available to fulfill that function. The responsibilities of the instructor of record are to:
 - a. Approve the course of study
 - b. Approve the credentials of other faculty involved
 - c. See that the material is presented in full and in a timely manner
 - d. Evaluate student's progress in achieving student outcomes
 - e. Generate course grade and see that the grades are turned in to the Office of the Registrar
 - f. Assume responsibility for academic issues that arise in the course

- The faculty member teaching the course must have taught the permanent course or a related course prior to teaching a directed study.
- The initiation of directed studies must come from the faculty in the discipline and must be approved by the dean or director.
- Once the directed study course has been approved, the student will be automatically registered for the course unless holds exist on the student account.
- Student must be an admitted certificate/degree-seeking student.

Independent Study

An independent study course consists of topics or problems chosen by the student with the approval of the department concerned, supervision of an instructor and final approval by the dean/director. These courses are not duplications of and must differ significantly from any catalog course. The independent study provides the opportunity for students who have completed most of the required courses in their program to study topics that are not offered.

The policies are as follows:

- Retroactive registration is not permitted.
- Independent study courses cannot be used to fulfill GERs. This policy is not petitionable.
- Independent Study Forms incorrectly completed will not be processed.
- Courses scheduled for less than a full semester may not be offered for more than 1 credit each week.
- For fall and spring semesters, the deadline for independent study registration is the end of the ninth week.
- For the summer semester, the deadline for independent study registration is the end of the seventh week of the 10-week session.
- Only regular or term faculty are allowed to be the instructor of record for the independent study courses. The dean or director may function as instructor of record when no regular or term faculty are available to fulfill that function. The responsibilities of the instructor of record are to:
 - a. Approve the course of study
 - b. Approve the credentials of other faculty involved
 - c. See that the material is presented in full and in a timely manner
 - d. Evaluate student's progress in achieving student outcomes
 - e. Generate course grade and see that the grades are turned in to the Office of the Registrar
 - f. Assume responsibility for academic issues that arise in the course
- The initiation of independent study courses must come from faculty in the discipline and must be approved by the dean or director.
- Once the independent study course has been approved, the student will be automatically registered for the course unless holds exist on the student account.
- Student must be an admitted certificate/degree-seeking student.

Crosslisted Courses

A course that contains content related to two or more disciplines may be offered under the prefixes that identify those disciplines. These courses

are termed "crosslisted." Students may enroll in the course under the discipline or prefix of their choice. Catalog descriptions of these courses include the phrase "Crosslisted with." The class information on UAOnline indicates if a class is being offered in crosslisted format.

Stacked Courses

Two or more courses from the same discipline (prefix) covering common course content, but at different course levels, may be taught together. These courses are stacked, and students may register for the course level that meets their objectives and for which they meet the prerequisites. Students enrolled in stacked courses either meet at the same time and location or receive instruction by the same delivery mode. Expectations for student performance and achievement reflect course level. Catalog descriptions of these courses include the phrase "May be stacked with." The class information on UAOnline indicates whether a class is being offered in stacked format.

Internships

An internship is a student work experience in which the employer or agency is the student's immediate supervisor, is active in planning the expected outcomes and is involved in the evaluation of the student's achievements. A faculty member must act as instructor and approve the work activities, the student learning outcomes and the evaluation method. The instructor reviews all of the final documents upon completion of the assignment and assigns the final grade.

Internships require that the student completes a minimum of 45 hours of work with the employer for each credit earned. Final course grades are generally based on hours worked, outcomes achieved, employer and instructor ratings of work performance, and evaluation of required journals or reports. Registration deadlines follow independent study and directed study dates.

Depending on the type of internship, internships may be arranged either through the student's academic program or the following offices:

- UAA Anchorage (<https://www.uaa.alaska.edu/careerdevelopment/student/student-internship-information.cfm>)
- Kenai Peninsula College (http://www.kpc.alaska.edu/student_life/student_resources/career_services/cccec)
- Kodiak College (Students should contact their academic program.)
- Matanuska-Susitna College (<http://matsu.alaska.edu/office/student-services/career-advising>)
- Prince William Sound College (<http://pwsc.alaska.edu/academic-resources>)

Practicum

A practicum is a student work experience for which the academic department establishes the objectives and outcomes. The instructor facilitates, monitors and evaluates student accomplishments, and assigns the final grade. Registration deadlines follow independent study and directed study dates.

Practicum Requirements and General Information

Many academic programs require completion of a practicum, clinical assignment or other field placement. Before applying to such programs, students should familiarize themselves with the requirements for such placements, which may include infectious disease testing, drug

testing, criminal background checks or other qualifications. Students are responsible for ensuring that there are no legal or other impediments to their acceptance into a placement.

Criminal History

Placements in facilities with programs administered by the state of Alaska Department of Health and Social Services are subject to background checks under state law and regulation. Criminal background checks may also be required for placements in other facilities.

Health and Safety

Placements may require documentation of immunity to infectious diseases. The circumstances in which a student with an infectious disease, or who otherwise poses a significant risk to the health and safety of others, may participate in a placement will be determined on a case-by-case basis. A student who poses a significant risk to the health and safety of others that cannot be eliminated by a reasonable modification of policies, practices or procedures, or by the provision of auxiliary aids or services, will be excluded from participation.

The program descriptions in this catalog may contain more detailed requirements for specific programs. Students should always check on requirements for practicum, clinical or other field placements for the programs in which they intend to enroll.

Thesis and Individual Research Courses

Thesis and individual research courses are designed between faculty members and students to allow students the chance to pursue special individual topic interests. Registration deadlines follow independent study and directed study dates.

Interdisciplinary/Multidisciplinary Courses

Courses that explore the broader meaning and significance of concepts, principles or research techniques common to several disciplines are called interdisciplinary. Courses that examine a common topic or problem by drawing upon the perspectives of many disciplines are called multidisciplinary.

Flexible Format Courses

Certain courses are offered in flexible formats. They include:

Self-Paced

These courses offer an alternative to the traditional lecture classes and are especially suited to motivated, self-directed learners. Self-paced courses allow students to work in a low-anxiety, supportive environment. They include the following:

- Group study
- Tutorial study
- Scheduled lectures
- Diverse learning aids such as video, audio, computer and library resources.

Open Entry/Open Exit

These courses permit students to enter and exit any time during the semester. Students generally work at their own pace to complete the required course content.

Variable Credit

These courses may be taken for a variable number of credits with prior approval of the faculty member. Workload and tuition depend on the number of credits selected.

Short

Short courses offer the content of a full semester course in a shorter time frame.

Mini

Mini courses are offered for fewer than three credits and usually in a shorter time frame than a full semester.

Age Limit of Credits

There is no university-wide undergraduate policy on the age limit of credits. However, to guarantee currency of course content, some departments and degree programs require courses to have been completed within a specified period of time. Contact specific departments for more information.

Course Load

Students may register for a maximum of 19 credits during the fall and spring semesters, and a maximum of 15 credits during the summer session. Students who want to enroll for additional credits must submit an approved Request for Credit Overload Form to the Office of the Registrar.

The faculty advisor and appropriate dean or director must approve overload requests for certificate- or degree-seeking students.

Students should consider their graduation timeline when planning their study load. The minimum number of required credits is 60 for an associate degree and 120 for a baccalaureate degree. To complete an associate degree in two years or a baccalaureate degree in four years (excluding summers), a full-time student should plan to take a minimum of 15 credits each semester. Some degrees require more than the minimum number of credits.

Students should be aware that the need for preparatory work (for example, in writing or mathematics) in preparation for university-wide general education required courses may further extend the time required to complete their programs. When planning their course loads, students should also keep non-school demands on available time, such as employment and/or family responsibilities, firmly in mind.

Full-Time/Part-Time Status

An undergraduate student who is enrolled at UAA for 12 or more credits is classified as full-time. An undergraduate who is enrolled at UAA for fewer than 12 credits is classified as part-time and must be enrolled in at least six credits to be considered half-time.

A student who has been admitted to a UAA graduate program and is enrolled at UAA for 9 or more 600-level credits is classified as full-time. Courses at the 400-level will count toward full-time status only if they are applicable to the graduate degree program. A half-time graduate student is one enrolled for at least 5 graduate credits (400-

level credits included if in the graduate degree program). See Graduate Programs (p. 345) for information.

Audited courses, credit-by-examination courses, continuing education units (CEUs) and professional development courses (500-level) are not included in the computation for full-time or part-time status.

Course Performance

In order to evaluate student learning, grades are assigned by faculty to individual students that indicate achievement of course objectives. Student behaviors such as class attendance, class participation, completion of all assignments and achievement of passing marks on all graded activities are the foundation for success of the student.

Syllabus and Course Procedures

The course syllabus is the student guide to the course. Students should receive a syllabus at the beginning of each course that describes the course content, policies within the course, procedures that govern the delivery of the course, the learning outcomes and the grading system used.

Students are responsible for obtaining the syllabus or for having access to it electronically and understanding the course policies in the syllabus. Any questions regarding information in the syllabus should be directed to the instructor for clarification.

Class Attendance

Regular attendance and active participation are expected in all classes. Students are responsible for class work even if there are legitimate reasons for their absence.

Unexcused absences may result in a student being withdrawn from the class or receiving a failing grade. Unreasonable refusal to accommodate an emergency absence or class absence as described below may be appealed under the Academic Dispute Resolution Procedure Other Academic Decisions (see Academic Rights of Students (p. 25) for more information).

Class Absences

Students who receive short-term military orders or obligations are responsible for making advance arrangements with faculty members to enable them to meet course requirements. Students participating in official intercollegiate activities on behalf of UAA, including, but not limited to, athletic competitions, debate and performing arts, are responsible for making advance arrangements with faculty members to enable them to meet course requirements. Faculty are encouraged to make reasonable accommodations for such students. In some cases accommodation may not be possible.

Military Students Called to Active Duty or Deployment

Students called to active duty or are involuntarily activated, deployed or relocated during an academic term may be able to make arrangements with their faculty members to complete their courses via e-learning. In those cases where this is not possible or desirable, these students are

eligible for the 100 percent refund of tuition and fees and a prorated adjustment on housing and meal plans. Returning military students are not required to reapply for admission and are welcomed back as in-state residents for tuition purposes. Military students who return after their admitted catalog expires should meet with an academic advisor for assistance.

Course Placement

Appropriate course placement is an essential component of academic success. Students are encouraged to meet with their advisor prior to registration to discuss placement scores and course prerequisites for appropriate course selection. Refer to this catalog for specific course prerequisites and placement score requirements.

Communication Course Placement

The following communication (COMM) courses require appropriate placement scores for course registration. A student who has earned an appropriate ACT, SAT, or Accuplacer score is eligible to enroll in the courses listed in the table below. Students using Accuplacer Next Generation scores must meet the minimum Accuplacer Next Generation scores in both Reading and Writing or be placed by additional departmentally-approved measures.

	Accuplacer Next Generation	ACT English	SAT Evidence-Based Reading and Writing
COMM A111	Writing: 265 Reading: 265	22	560
COMM A235	Writing: 265 Reading: 265	22	560
COMM A237	Writing: 265 Reading: 265	22	560
COMM A241	Writing: 265 Reading: 265	22	560

Mathematics Course Placement

A student who has completed the course prerequisites is eligible to enroll in MATH or STAT courses. MATH or STAT prerequisite courses are valid for 24 months from the date completed.

A student who has not completed the course prerequisites must earn an appropriate score on a UAA-approved placement test. MATH placement test scores are valid for one year from the date taken.

Detailed information about Mathematics and Statistics placement testing, as well as access to the test, are available on the UA ALEKS website (<https://www.alaska.edu/aleks>).

The following table shows the scores needed to place into specific courses.

Math Course	ALEKS Score
MATH A054 or MATH A060	0-16
MATH A055	17-29
MATH A105	30-54
MATH A104 or MATH A115	30-100
MATH A121 or MATH A151 or MATH A155	55-77

STAT A200	55-100
MATH A152	65-77
STAT A253	65-100
MATH A221 or MATH A251	78-100

Writing Course Placement

The WRTG prefix replaces the prefixes ENGL and PRPE for courses in the writing sequence. Writing (WRTG) and Preparatory English (PRPE) courses require appropriate placement scores for course registration. A student who has earned an appropriate ACT, SAT, or Accuplacer score is eligible to enroll in the courses listed in the table below.

Students with ACT or SAT scores that place them in 200-level WRTG courses may receive credit by placement for WRTG A111 upon completion of WRTG A211, WRTG A212, WRTG A213 or WRTG A214 with a grade of C or better. To receive this credit, students must submit the appropriate form to the Office of the Registrar.

Students placing into WRTG A080 or WRTG A090 should consult a First Year Advisor to discuss course options and consider additional placement measures. Call 907.786.6856 to request a writing placement appointment on the Anchorage campus or contact the testing center at your community campus.

Detailed information about testing services for writing placement, as well as student guides and sample questions, are available at the following testing centers and on their websites, linked below.

UAA Anchorage Testing Center: (907) 786-4525 or uaa_testingcenter@alaska.edu

Kenai Peninsula College Learning Centers: Kenai River Campus Learning Center (907) 262-0330; Kachemak Bay Campus Learning Resource Center (907) 235-1658; or call toll-free 1-877-262-0330 and ask to be connected to one of the Centers.

Kodiak College Test Center: (907) 486-1232
uaa_koctesting@alaska.edu

Matanuska-Susitna College Elizabeth J. Fallon Learning Resource Center (<http://matsu.alaska.edu/offices/learning-resource-center/testing>): (907) 745-9772 or matsutesting@alaska.edu

Prince William Sound College: (907) 834-1600 or pwsc.testing@alaska.edu

The following table shows the scores needed to place into specific courses. Students using Accuplacer Next Generation scores must meet the minimum Accuplacer Next Generation scores in both Reading and Writing or be placed by additional departmentally-approved measures.

	Accuplacer Next Generation	ACT English	SAT Evidence-Based Reading and Writing
WRTG A090	Writing: 235 Reading: 235	N/A	N/A
WRTG A110	Writing: 250 Reading: 250	18	450
WRTG A111	Writing: 265 Reading: 265	22	560

WRTG A211	N/A	30	610
WRTG A212			
WRTG A213			
WRTG A214			

E-mail Communications

UAA uses e-mail to communicate with students on many important matters. The university automatically assigns each student an official University of Alaska (UA) e-mail account at the time of admission to the university for certificate/degree-seeking students and at the time of registration for all other students.

All communication related to registration and enrollment activities will occur either through the preferred e-mail that students submit via UAOnline or through the official UA-assigned e-mail. Students should be careful to keep these accounts clear and review the correspondence received there regularly.

Students are responsible for knowing and, when appropriate, acting on the contents of all university communications sent to their official UA e-mail accounts. To receive university communication at a different e-mail address, students may forward e-mail from their assigned UA accounts to any valid third party e-mail address of their choice that accepts forwarded e-mail. More information may be found on the IT Services website (<https://www.uaa.alaska.edu/about/administrative-services/departments/information-technology-services>).

Grading

Academic Letter Grades

With the exception of letter grades assigned to 500-level professional development courses, these letter grades carry grade points and are used to calculate grade point averages (GPAs). Faculty must submit a last date of attendance in conjunction with an F grade.

A	Honor grade; indicates comprehensive mastery of required work.
B	Indicates high level of performance in meeting course requirements.
C	Indicates satisfactory level of performance.
D	Indicates lowest passing grade; may not be acceptable to satisfy requirements in certain majors and in graduate programs.
F	Indicates failure.

Non-Academic Grades

These grades do not carry grade points and are not used to calculate GPAs. However, CR, NC, P, NB and NP grades may be used to determine satisfactory academic progress for purposes of financial aid.

CR	Indicates credit was received for the course.

DF	Deferred indicates course requirements cannot be completed by end of semester. It is to be used for courses that cannot normally be completed in a semester (such as thesis, project, research, internships, etc.).
I	Incomplete indicates additional work must be completed to receive a final grade. If the coursework is not completed within one year and the faculty member does not submit a change of grade at that time, the I will become a permanent grade.
NB	No basis indicates there is insufficient progress or attendance for evaluation to occur.
NC	Indicates no credit was received for the course.
NP	Indicates work that is not passing (no credit received).
P	Indicates passing work.

Other Designations

These designations do not carry grade points and are not used to calculate GPAs but may be used to determine satisfactory academic progress for purposes of financial aid.

AU	Audit indicates enrollment for information only (no credit received).
W	Indicates withdrawal from the course.

Credit/No Credit

Credit/no credit (CR/NC) is a grading option that encourages students to explore areas of interest. Undesignated electives may be completed under this option. A maximum of 15 credits earned by this option may be applied to an associate or baccalaureate degree.

This option may not be used in courses that meet General Education Requirements (GERs) or major or minor requirements in a student's program. If a student later changes their major/minor and the course becomes a requirement, the course may be accepted in the new major/minor at the discretion of the new department.

The CR/NC option is not available for graduate courses, nor can this option be used on courses repeated for GPA improvement.

The instructor grades students using the grading basis approved for the course (A-F or P/NP). Students are awarded credit for the course if their final grade is P or C or higher. A grade of CR (credit) is entered on the student's transcript.

For performance comparison only, a grade of CR is considered equivalent to a grade of C or higher. A grade of CR does not carry grade points and is not included in GPA calculations.

Through the end of week two of the semester, students may request the CR/NC grading option by contacting the Office of the Registrar. Once selected, this grading option may not be changed to regular grading after the end of week two of the semester.

Deferred Grade

A deferred grade (DF) is used when the student is making satisfactory progress but completion of the course (such as thesis, project, research courses, internships, etc.) typically requires more than one semester. Credit is withheld, without academic penalty, until the course requirements are met. If coursework is not completed prior to fulfilling graduation requirements or if the student fails to maintain enrollment for one year, the DF will become a permanent grade, and it will be necessary for the student to re-register to obtain credit for the course.

Incomplete Grade

An incomplete grade (I) is assigned only at the discretion of the instructor. It is used to indicate that a student has made satisfactory progress in the majority of the work in a course but, for unavoidable absences or other conditions beyond the control of the student, has not been able to complete the course. Students assigned an incomplete grade are not entitled to complete the remaining coursework within the classroom/lab or to any additional instruction, nor may they participate in the class/lab during a future semester without re-registering, paying tuition and retaking the course.

An Incomplete Grade Contract Form between the student and the faculty member, stipulating the assignment(s) required to finish the course and the time frame for submission, is required and should be filed with the department or dean's office when an incomplete grade is assigned. Coursework must be completed by the date specified in the contract, not to exceed one year.

Upon completion of the required coursework, the faculty member must submit a Change of Grade Form to the Office of the Registrar. If coursework is not completed by the contract deadline and the faculty member does not submit a Change of Grade Form at that time, the incomplete will become a permanent grade. The student has until the last day of class of the first full semester following the end of the contract to resolve any grading discrepancies.

No Basis Grade

A no basis (NB) grade may be used when the student has not attended or there is insufficient student progress and/or attendance for evaluation to occur. No credit is awarded, nor is NB calculated in the GPA. However, this grade may be used to determine satisfactory academic progress for purposes of federal financial aid. This is a permanent grade and may not be used to substitute for the incomplete grade. It cannot be removed later by completing outstanding work. Earning a NB grade in a retaken course will not replace the grade previously earned. Faculty must submit a last date of attendance in conjunction with this grade.

Pass/No Pass

In some courses, students are graded on a pass/no pass (P/NP) basis. This grading system is established at the time the course is approved and must apply to the class as a whole. Pass/no pass grading is not a student option.

When a course is graded pass/no pass, the faculty member must clearly explain this fact to the students at the beginning of the class.

For performance comparison only, a grade of P (pass) is considered equivalent to a grade of C or higher in undergraduate courses and a grade of B or higher in graduate courses. Pass/no pass grades are used to determine satisfactory academic progress for purposes of federal financial aid. However, P/NP grades do not carry grade points and are not used in GPA calculations.

Grade Changes

Grades submitted by the faculty, other than incomplete (I) or deferred (DF), are assumed to be final grades. A grade may not be changed unless a grading error, such as a mathematical miscalculation or inaccurate recording, has been made on the part of the faculty member. Corrections of grading errors must be made by the last class day of the next regular semester following the one in which the grade was originally assigned. A Change of Grade Form must be submitted to the Office of the Registrar by the appropriate faculty member. Change of Grade Forms will not be accepted if submitted by the student.

Allegations of final grading errors or arbitrary and capricious grading for a final grade assignment are reviewed according to the Academic Dispute Resolution Procedure (p. 25).

Grade Point Average (GPA) Computation

UAA uses the 4-point system as a measure of scholastic success. Academic letter grades carry the following values:

A	4.00
B	3.00
C	2.00
D	1.00
F	0.00

A quality hour (Q Hr) is defined as one credit hour for a course graded A-F. For each course the student takes with quality hours, that number of quality hours for the course is multiplied by the point value of the grade to give the total grade points (Q Pts) for that course. The sum of the total grade points for all courses is then divided by the total number of quality hours to compute the grade point average (GPA).

For example, a student who took three courses and earned an A for a 3-credit course, a C for a 1-credit course, and a P (pass) for a 2-credit course would have a total of four quality hours. The total grade points for the first course would be 12 and for the second would be 2. The GPA would be calculated by dividing the sum of 12 and 2 by 4, the number of quality hours, to determine a GPA of 3.50.

The following non-academic grades do not carry grade points and are not used in calculating the GPA: P, NP, CR, NC, DF, I, NB and letter

grades assigned to 500-level courses. In addition, AU and W are not grades and are not used in GPA calculations.

Credits accepted in transfer are not used to calculate the student's UAA GPA. They are, however, used to calculate the student's overall GPA for graduating with honors. Grades and credits earned from all retaken courses are also included in calculating the student's GPA for graduating with honors. Students may find additional information on the impact of retaken courses on GPA by viewing "Retaking Courses (p. 30)."

Graduation

Application for Graduation

UAA awards degrees and certificates and prints diplomas year-round. To be eligible for graduation at the end of a given semester, a student must:

- Be formally admitted to the degree or certificate program
- Submit an Application for Graduation through UAOnline and pay the required fee

Application for graduation deadlines are the Friday before finals for the semester in which the student intends to graduate. Students wishing to have their name in the commencement ceremony program must apply by an earlier deadline. See the Office of the Registrar's calendar (<https://www.uaa.alaska.edu/students/registrar/calendar/index.cshml>) for specific deadline dates.

If the student meets all requirements by the end of the semester, the certificate or degree is awarded after the completion of the semester. Students are held responsible for meeting all academic regulations and degree/certificate requirements. Students who complete requirements before the end of the semester may contact uaa.degrees@alaska.edu to request that their certificate/degree be awarded early.

Occupational endorsement certificates are awarded by the offering academic unit rather than at commencement. Students should check with their advisors to determine what arrangements are followed.

Names of students receiving certificates and degrees appear in the commencement program and are released to the media unless a student places a directory hold on their record.

Students who apply for graduation and do not complete their degree/certificate requirements by the end of the semester in which they have applied to graduate, but are within 6 or fewer credits of completion, will have their application for graduation moved to the following semester by the Office of the Registrar (spring to summer, summer to fall, or fall to spring). This courtesy change will be granted one time. Students with more than 6 outstanding credits of requirements remaining, or who have 6 credits or fewer remaining for a second semester, must reapply for graduation and pay another application fee.

Graduation with Honors

To be eligible to graduate with honors, associate and baccalaureate degree-seeking students must earn a cumulative grade point average

(GPA) of 3.50 or higher in all college work attempted at UAA. Graduate students are not eligible for university honors.

A transfer student who is earning an associate degree must complete a minimum of 15 resident credits with academic letter grades to be eligible to graduate with honors. A transfer student who is earning a baccalaureate degree must complete a minimum of 30 resident credits with academic letter grades to be eligible to graduate with honors. All transfer students must have a cumulative GPA of 3.50 or higher in all college work attempted both at UAA and at all other accredited institutions attended and for all courses used to fulfill the degree program in order to graduate with honors.

At UAA, graduation with honors represents a student's entire academic history. All grades and credits earned (Ds, Fs, retaken courses, courses lost in academic bankruptcy, etc.) will be included in determining eligibility to graduate with honors. In addition, a student transferring coursework and grades must have a minimum of 70 percent of their credits submitted with letter grades to be eligible to graduate with honors.

Honors are awarded to associate and baccalaureate degree students with cumulative GPAs as follows:

Cum Laude	3.50 to 3.79
Magna Cum Laude	3.80 to 3.99
Summa Cum Laude	4.00

Commencement

Students who complete certificate or degree requirements in the summer and fall semesters will be invited to participate in fall commencement ceremonies in December. Students who complete certificate or degree requirements in the spring semester will be invited to participate in spring commencement ceremonies in May. Undergraduate students will only be eligible to wear honor cords and be recognized in the commencement program as receiving university honors if their overall GPA (including transfer work) at the end of the preceding semester is 3.50 or above. If students earn university honors after their final grades are submitted, they will have honors displayed on their diploma and academic transcript and may request an honor cord with their diploma.

Hoarding Ceremony

Graduate students who complete degree requirements will be invited to participate in a formal hoarding ceremony. Hoarding ceremonies are typically held the day prior to commencement.

Nontraditional Credit Policies

Nontraditional Credit

Academic credit may be awarded to students who demonstrate mastery of knowledge or skills that were acquired outside of an accredited college or university. Nontraditional credit evaluations are available for accepted degree-seeking UAA students. Credit is granted for coursework for which students show documented achievement of equivalent outcomes. UAA faculty have evaluated specific training

programs, exams and certifications in a number of disciplines and have determined that those listed below may result in the award of academic credit. The discipline and number of credits are established by the faculty and reviewed on a regular basis. Use of nontraditional credit to complete certificate or degree requirements may be limited; students should see their academic advisor for more information.

See below for more detailed information. Courses that have an * in front of the course title satisfy General Education Requirements.

Advanced Placement (AP) Program

Credit may be awarded for successful completion of the AP examination. Credit awarded for examinations may be elective credit. A student may work with an individual department to determine if more specific course credit may be awarded for a specific examination.

A student desiring credit for an AP examination must request that an official report of examination scores be sent to the UAA Office of the Registrar. Credit may be received for more than one AP examination.

Arts

Test	Min. Score	UAA Equivalent	Credits
Art History	3	ART A261 *History of Western Art I (3 cr.) and ART A262 *History of Western Art II (3 cr.)	6
Music Theory	4	MUS A111 Fundamentals of Music	3
Studio Art	3	ART 100-level elective	4

English

Test	Min. Score	UAA Equivalent	Credits
English Language and Composition	3	WRTG A111 *Introduction to Composition	3
English Literature and Composition	3	ENGL A121 *Introduction to Literature	3

History and Social Sciences

Test	Min. Score	UAA Equivalent	Credits
Comparative Government and Politics	3	PS 100-level Social Sciences GER	3
European History	3	HIST A101 *Western Civilization I HIST A102 *Western Civilization II	6
Human Geography	3	GEOG 100-level Social Sciences GER	3
Macroeconomics	3	ECON A201 *Principles of Macroeconomics	3
Microeconomics	3	ECON A202 *Principles of Microeconomics	3
Psychology	3	PSY A111 *General Psychology	3
United States Government and Politics	3	PS A101 *Introduction to American Government	3
United States History	3	HIST A131 *History of the United States I HIST A132 *History of the United States II	6
World History	3	HIST A101 *Western Civilization I	3

Math and Computer Science

Test	Min. Score	UAA Equivalent	Credits
Calculus AB	4	MATH A251 *Calculus I	4
Calculus BC	4	MATH A251 *Calculus I (4 cr.) and MATH A252 *Calculus II (4 cr.)	8
Computer Science A	3	CSCE A201 Computer Programming I	3
Statistics	3	STAT A200 *Elementary Statistics	3

Sciences

Test	Min. Score	UAA Equivalent	Credits
Biology	4	BIOL A102 *Introductory Biology (3 cr.) and BIOL A103 *Introductory Biology Lab (1 cr.) and 100-level BIOL elective (4 cr.)	8
Biology	5	BIOL A108 *Principles and Methods in Biology	6
Chemistry	3	CHEM A105 *General Chemistry I (3 cr.) and CHEM A105L *General Chemistry I Lab (1 cr.)	4
Chemistry	4	CHEM A105 *General Chemistry I (3 cr.) and CHEM A105L *General Chemistry I Lab (1 cr.) and CHEM A106 *General Chemistry II (3 cr.) and CHEM A106L *General Chemistry II Lab (1 cr.)	8
Environmental Science	3	ENVI A211 *Environmental Science (3 cr.) and ENVI A211L *Environmental Science Lab (1 cr.)	4
Physics 1	4	PHYS 100-level Natural Science with lab GER	4
Physics 2	4	PHYS 100-level Natural Science with lab GER	4
Physics C: Mechanics	4	PHYS 200-level Natural Science with lab GER	4
Physics C: Electricity and Magnetism	4	PHYS 200-level Natural Science with lab GER	4

World Languages and Cultures

Test	Min. Score	UAA Equivalent	Credits
Chinese Language and Culture	3	CHIN A101 *First Year Chinese I (4 cr.) and CHIN A102 *First Year Chinese II (4 cr.)	8
French Language and Culture	4	FREN A101 *Elementary French I (4 cr.) and FREN A102 *Elementary French II (4 cr.)	8
German Language and Culture	4	GER A101 *Elementary German I (4 cr.) and GER A102 *Elementary German II (4 cr.)	8
Italian Language and Culture	4	LANG 100-level Humanities GER	8
Japanese Language and Culture	3	JPN A101 *First Year Japanese I (4 cr.) and JPN A102 *First Year Japanese II (4 cr.)	8
Latin	3	LAT 100-level Humanities GER	6
Spanish Language and Culture	4	SPAN A101 *Elementary Spanish I (4 cr.) and SPAN A102 *Elementary Spanish II (4 cr.)	8
Spanish Literature and Culture	4	SPAN A201 *Intermediate Spanish I (4 cr.) and SPAN A202 *Intermediate Spanish II (4 cr.)	8

Certified Experience Credit

UAA may award elective or specific course credit for learning that is documented with a professional certification or completion of exams

that lead to certification. These certificates indicate that individuals have met certain standards and demonstrated specific competencies. Students should contact departments directly with questions about specific certifications.

UAA does not accept recommendations related to massive open online courses (MOOCs) at this time.

College-Level Examination Program (CLEP)

Credit may be awarded for successful completion of the CLEP examination. Credit awarded for examinations may be elective credit. A student may work with an individual department to determine if more specific course credit may be awarded for a specific examination.

A student desiring credit for a CLEP examination must request that an official report of examination scores be sent to the UAA Office of the Registrar. Credit may be received for more than one CLEP examination.

Composition and Literature

Test	Min. Score	UAA Equivalent	Credits
American Literature	50	ENGL 200-level Humanities GER	3
Analyzing and Interpreting Literature	50	ENGL 100-level elective	3
Analyzing and Interpreting Literature	58	ENGL A121 *Introduction to Literature (with successfully passed UAA English Department assigned essay)	3
College Composition	50	WRTG A111 *Introduction to Composition	3
College Composition Modular	50	WRTG A111 *Introduction to Composition (with successfully passed UAA English Department assigned essay)	3
English Literature	50	ENGL 200-level Humanities GER	3

Foreign Languages

Test	Min. Score	UAA Equivalent	Credits
French Language	55	FREN A101 *Elementary French I (4 cr.) and FREN A102 *Elementary French II (4 cr.)	8
French Language	72	FREN A101 *Elementary French I (4 cr.) and FREN A102 *Elementary French II (4 cr.) and FREN A201 *Intermediate French I (4 cr.) and FREN A202 *Intermediate French II (4 cr.)	16
German Language	55	GER A101 *Elementary German I (4 cr.) and GER A102 *Elementary German II (4 cr.)	8
German Language	72	GER A101 *Elementary German I (4 cr.) and GER A102 *Elementary German II (4 cr.) and GER A201 *Intermediate German I (4 cr.) and GER A202 *Intermediate German II (4 cr.)	16
Spanish Language	55	SPAN A101 *Elementary Spanish I (4 cr.) and SPAN A102 *Elementary Spanish II (4 cr.)	8
Spanish Language	72	SPAN A101 *Elementary Spanish I (4 cr.) and SPAN A102 *Elementary Spanish II (4 cr.) and SPAN A201 *Intermediate Spanish I (4 cr.) and SPAN A202 *Intermediate Spanish II (4 cr.)	16

History and Social Sciences

Test	Min. Score	UAA Equivalent	Credits
American Government	50	PS A101 *Introduction to American Government	3
Human Growth and Development	50	PSY A150 *Lifespan Development	3
Introduction to Educational Psychology	50	EDFN A100-level elective	3
Principles of Microeconomics	58	ECON A202 *Principles of Microeconomics	3
Introductory Psychology	50	PSY A111 *General Psychology	3
Introductory Sociology	50	SOC A101 *Introduction to Sociology	3
Social Sciences and History	58	SSCI 100-level Social Science GER (3 cr.) and SSCI 100-level Humanities GER (3 cr.)	6

Science and Mathematics

Test	Min. Score	UAA Equivalent	Credits
Biology	58	BIOL A102 *Introductory Biology (3 cr.) and BIOL A103 *Introductory Biology Lab (1 cr.)	4
Calculus	50	MATH A251 *Calculus I	4
Chemistry	50	CHEM A105 *General Chemistry I and CHEM A105L *General Chemistry I lab and CHEM A106 *General Chemistry II and CHEM A106L *General Chemistry II lab	8
College Algebra	50	MATH A151 *College Algebra for Calculus	4
College Mathematics	50	MATH 100-level elective	6
Natural Sciences	50	BIOL A102 *Introductory Biology (3 cr.) and NSCI 100-level elective (3 cr.)	6
Pre-calculus	50	MATH 100-level Quantitative Skills GER	3

Business

Test	Min. Score	UAA Equivalent	Credits
Financial Accounting	50	ACCT A201 Principles of Financial Accounting	3
Information Systems (formerly Information Systems and Computer Applications)	50	CIOA 100-level elective	3
Introductory Business Law	50	BA 100-level elective	3
Principles of Management	50	BA 200-level elective	3
Principles of Marketing	50	BA 200-level elective	3

Credit for Prerequisite Not Taken

An accepted degree-seeking UAA student who has completed a UAA course with a grade of C or higher may be eligible to receive credit for the prerequisite course. This applies only to specific UAA catalog courses approved in advance by the UAA program, which also determines the number and level of the credits awarded. Credit

for prerequisite not taken does not apply to credit earned through other nontraditional credit procedures, nor to special topics (-93) or independent study (-97). Students complete a form (<https://www.uaa.alaska.edu/students/registrar/registrarforms.cshtml>) and pay an administrative fee to have the credit applied to their transcript. A pass (P) grade will be transcribed.

The approved UAA courses are included in the sections below.

Alaska Native Language Credit for Prerequisite Not Taken

An accepted degree-seeking UAA student who has completed AKNS A102A, AKNS A102B, AKNS A102C, AKNS A102D or AKNS A102E with a grade of C or higher is eligible to receive credit for the preceding course AKNS A101A, AKNS A101B, AKNS A101C, AKNS A101D or AKNS A101E. To receive credit, students must submit the appropriate form (<https://www.uaa.alaska.edu/students/registrar/registrarforms.cshtml>) to the Office of the Registrar and pay an administrative fee.

Language Credit for Prerequisite Not Taken

An accepted degree-seeking UAA student who has completed one of the Department of Languages UAA catalog courses (A102-A301) in residence with a grade of C or higher is eligible to receive credit for the two immediately preceding courses, if any, up to a total of 8 credits, not to exceed the level of A202. Language Credit for Prerequisite Not Taken is limited to one time per language. This policy does not apply to credit earned through Department of Languages literature or culture courses. To receive this credit, students must submit the appropriate form (<https://www.uaa.alaska.edu/students/registrar/registrarforms.cshtml>) to the Office of the Registrar and pay an administrative fee.

Writing Credit for Prerequisite Not Taken

Admitted, degree-seeking UAA students with ACT or SAT scores that place them in 200-level WRTG courses may receive credit by placement for WRTG A111 upon successful completion of WRTG A211, WRTG A212, WRTG A213 or WRTG A214 with a grade of C or better. Students who transfer in a 200-level or higher Written Communications GER course with a grade of C or higher and who have not completed the six credit Written Communications Skills GER may also receive credit for WRTG A111. To receive this credit, students must submit the appropriate form (<https://www.uaa.alaska.edu/students/registrar/registrarforms.cshtml>) to the Office of the Registrar and pay an administrative fee.

DSST Examinations

Credit may be awarded for successful completion of the DSST (formerly known as DANTES) examination. Credit awarded for examinations may be elective credit. A student may work with an individual department to determine if more specific course credit may be awarded for a specific examination.

A student desiring credit for a DSST examination must request that an official report of examination scores be sent to the UAA Office of the Registrar. Credit may be received for more than one DSST examination.

Business

Test	Min. Score	UAA Equivalent	Credits
Business Ethics and Society (475)	400	PHIL 200-level elective	3
Business Law II (534) (accepted but no longer offered by DSST)	65	BA 300-level elective	3
Business Mathematics (812)	48 or 400	MATH 100-level elective	3
Human Resource Management (530)	46 or 400	BA 200-level elective	3
Introduction to Business (543)	46 or 400	BA A151 *Business Foundations	3
Computing and Information Technology (536)	45 or 400	CIS 100-level elective	3
Management Information Systems (551)	400	CIS 200-level elective	3
Organizational Behavior (531)	48 or 400	BA 200-level elective	3
Personal Finance (550)	46 or 400	BA A131 Personal Finance	3
Principles of Advanced English Composition (301)	400	Placement into WRTG A211, WRTG A212, WRTG A213 or WRTG A214 (eligible to receive credit with submission of appropriate form for WRTG A111 upon completion of 200-level WRTG course with a minimum grade of C)	
Principles of Finance (524)	46 or 400	BA 100-level elective	3
Principles of Financial Accounting (525) (accepted but no longer offered by DSST)	47 or 400	ACCT A201 Principles of Financial Accounting	3
Principles of Supervision (532)	46 or 400	BA A231 Fundamentals of Supervision	3

English

Test	Min. Score	UAA Equivalent	Credits
Technical Writing (820)	46 or 400	ENGL 100-level elective or WRTG A212 *Writing and the Professions (with successfully passed UAA English Department assigned essay)	3

Humanities

Test	Min. Score	UAA Equivalent	Credits
Art of the Western World (461)	48 or 400	ART A262 *History of Western Art II	3
Ethics in America (474)	400	PHIL 200-level Humanities Elective or PHIL 200-level Humanities GER (with successfully passed UAA Philosophy Department assigned essay)	3

Introduction to World Religions (496)	400	PHIL 200-level Humanities GER	3

Math

Test	Min. Score	UAA Equivalent	Credits
Fundamentals of College Algebra (424)	47 or 400	MATH A105 Intermediate Algebra	3
Principles of Statistics (450)	48 or 400	STAT A200 *Elementary Statistics	3

Physical Science

Test	Min. Score	UAA Equivalent	Credits
Astronomy (500)	48 or 400	ASTR 100-level Natural Sciences Lecture GER	3
Environment and Humanity: The Race to Save the Planet (511)	46 or 400	NSCI 100-level elective	3
Health and Human Development (508)	400	HLTH 200-level elective	3
Physical Geology (519) (accepted but no longer offered by DSST)	46	GEOL 100-level Natural Sciences Lecture GER	3
Principles of Physical Science I (512)	47 or 400	NSCI 100-level Natural Sciences Lecture GER	3

Social Science

Test	Min. Score	UAA Equivalent	Credits
Criminal Justice (498)	400	JUST 200-level elective	3
Foundations of Education (489)	46 or 400	EDFN 200-level elective	3
Fundamentals of Counseling (562)	45 or 400	PSY 200-level elective	3
General Anthropology (494)	47 or 400	ANTH A101 *Intro to Anthropology	3
Human/Cultural Geography (470)	48 or 400	GEOG 100-level Social Science GER	3
Introduction to Law Enforcement	45 or 400	JUST 100-level elective	3
Lifespan Development (490)	46 or 400	PSY A150 *Lifespan Development	3
Substance Abuse (495)	426	HS 300-level elective	3

UExcel Examinations

Credit may be awarded for successful completion of the UExcel examination. Credit awarded for UExcel examinations is elective credit.

A student may work with an individual department to determine if more specific course credit may be awarded for a specific examination.

A student desiring credit for the UExcel examination must request that an official report of examination scores be sent to the UAA Office of the Registrar. Credit may be received for more than one UExcel examination.

UExcel: Business

Test	Min. Score	UAA Equivalent	Credits
Business Ethics (BUSX-323)	C	300-level BA elective	3
Business Law (BUSX-230)	C	200-level BA elective	3
Financial Accounting (ACCX-211)	C	200-level ACCT elective	3
Managerial Accounting (ACCS-212)	C	200-level ACCT elective	3
Human Resource Management (BUSX-410)	C	300-level BA elective	3
Introduction to Macroeconomics (ECOX-262)	C	200-level ECON elective	3
Introduction to Microeconomics (ECOX-260)	C	200-level ECON elective	3
Labor Relations (BUSX-360)	C	300-level BA elective	3
Operations Management (BUSX-425)	C	300-level BA elective	3
Organizational Behavior (BUSX-315)	C	300-level BA elective	3
Principles of Finance (BUSX-350)	C	300-level BA elective	3
Principles of Management (BUSX-240)	C	200-level BA elective	3
Principles of Marketing (BUSX-250)	C	200-level BA elective	3
Quantitative Analysis (BUSX-437)	C	400-level BA elective	3
Workplace Communication with Computers (BUSX-220)	C	200-level BA elective	3

UExcel: Humanities

Test	Min. Score	UAA Equivalent	Credits
Bioethics: Philosophical Issues (HUMX-310)	C	300-level PHIL elective	3

College Writing (ENGX-110)	C	100-level ENGL elective	3
English Composition (ENGX-111)	C	100-level ENGL elective	6
Ethics: Theory and Practice (PHIX-310)	C	300-level PHIL elective	3
Introduction to Music (MUSX-101)	C	100-level MUS elective	3
Introduction to Philosophy (PHIX-101)	C	200-level PHIL elective	3
Interpersonal Communication (COMX-215)	C	200-level COMM elective	3
Literacy Instruction in the Elementary School (EDUX-310)	C	300-level EDEL elective	6
Spanish Language (SPAX-102)	C	100-level SPAN elective	6

UExcel: Natural Sciences and Mathematics

Test	Min. Score	UAA Equivalent	Credits
Anatomy & Physiology (BIOX-210)	C	200-level BIOL elective	6
Basic Genetics (BIOX-250)	C	200-level BIOL elective	3
Calculus (MATX-150)	C	200-level MATH elective	4
Contemporary Mathematics (MATX-100)	C	100-level MATH elective	3
Earth Science (GEOX-101)	C	100-level GEOL elective	3
Microbiology (BIOX-220)	C	200-level BIOL elective	3
Pathophysiology (BIOX-410)	C	400-level BIOL elective	3
Physics (PHYX-140)	C	100-level PHYS elective	3
Precalculus Algebra (MATX-116)	C	100-level MATH elective	3
Statistics (MATX-210)	C	200-level STAT elective	3

UExcel: Nursing

Test	Min. Score	UAA Equivalent	Credits
Fundamentals of Nursing (NURX-210)	C	200-level NURS elective	8
Adult Nursing (NURX-310)	C	300-level NURS elective	8

Maternal and Child Nursing (Associate) (NURX-220)	C	200-level NURS elective	6
Maternal and Child Nursing (Baccalaureate) (NURX-315)	C	300-level NURS elective	8
Psychiatric/ Mental Health Nursing (NURX-320)	C	300-level NURS elective	8

ECE: Nursing Theory

Test	Min. Score	UAA Equivalent	Credits
Essentials of Nursing Care: Health Safety (NURX-104)	C	100-level NURS elective	3
Essentials of Nursing Care: Health Differences (NURX-105)	C	100-level NURS elective	3
Essentials of Nursing Care: Chronicity (NURX-106)	C	100-level NURS elective	3
Health Differences Across the Lifespan 1 (NURX-211)	C	200-level NURS elective	3
Health Differences Across the Lifespan 2 (NURX-212)	C	200-level NURS elective	3
Health Differences Across the Lifespan 3 (NURX-213)	C	200-level NURS elective	3
Transition to the Registered Professional Nurse Role (NURX-214)	C	200-level NURS elective	3
Research in Nursing (NURX-430)	C	400-level NURS elective	3
Community-Focused Nursing (NURX-448)	C	400-level NURS elective	3

UExcel: Social Science and History

Test	Min. Score	UAA Equivalent	Credits
Abnormal Psychology (PSYX-310)	C	300-level PSY elective	3

Cultural Diversity (SOCX-305)	C	300-level SOC elective	3
Foundations of Gerontology (SOCX-310)	C	300-level SOC elective	3
Introduction to Psychology (PSYX-101)	C	100-level PSY elective	3
Introduction to Sociology (SOCX-105)	C	100-level SOC elective	3
Juvenile Delinquency (SOCX-320)	C	300-level JUST elective	3
Lifespan Developmental Psychology (PSYX-210)	C	100-level PSY elective	3
Political Science (POLX-170)	C	100-level PS elective	3
Psychology of Adulthood and Aging (PSYX-315)	C	300-level PSY elective	3
Research Methods in Psychology (PSYX-365)	C	300-level PSY elective	3
Social Psychology (PSYX-325)	C	300-level PSY elective	3
World Conflicts Since 1900 (HISX-340)	C	300-level PS elective	3
World Population	C	300-level SOC elective	3

International Baccalaureate

UAA awards credit for satisfactory performance (a score of 5 or higher) on the International Baccalaureate Higher Level Examinations. To receive this credit, students must request that an official report of examination scores be sent to the UAA Office of the Registrar.

Local Credit by Examination

Accepted degree- or certificate-seeking students may be awarded credit through locally developed comprehensive examinations on specific subjects. However, credit by examination is not available for all courses. Applications for and information on specific courses available through local credit by examination may be obtained from departments. There is a fee charged for local credit by examination.

General criteria for local credit by examination include:

1. Courses with numbers below 100 may not be taken through credit by examination.
2. Only regular catalog courses may be challenged. Special topics courses, trial courses, independent study courses and practicum courses may not be taken through credit by examination.

3. When an appropriate examination exists, CLEP, DSST, ACT-PEP or other national examinations may be administered instead of a local examination.
4. Determination of which courses may be taken through local credit by examination and construction of the examinations is at the discretion of the appropriate department.
5. Local credit by examination is not awarded for a course that duplicates one for which credit has already been granted.
6. Students are awarded credit and a grade of P (pass) if they successfully pass the local examination. If the examination is not passed, the course is not recorded on the student's transcript. Grades for courses taken through local credit by examination do not carry grade points used in calculating student GPAs.
7. Credit awarded through local credit by examination is considered nonresident credit.
8. There is no limit to the number of credits that may be acquired through the local credit by examination process.
9. Students have one year from the date of application to take the local examination.

Military Credit

Elective credits may be awarded to students who have completed active-duty military service in accordance with ACE Guide credit use.

Additionally, credits may be granted for formal service schools and the primary MOS/rating as recommended in the Guide to the Evaluation of Education Experiences in the Armed Services prepared by the American Council on Education. Students who wish to use military credit to meet degree requirements should work with an academic advisor to submit a Request for Evaluation of Military Training - JST (<https://www.uaa.alaska.edu/students/registrar/registrarforms.cshhtml>) or Request for Evaluation of CCAF Credit (<https://www.uaa.alaska.edu/students/registrar/registrarforms.cshhtml>) (Community College of the Air Force).

Registration

Registration is the process of signing up and paying for classes for a particular semester. Students may attend classes at UAA only after they have properly completed the registration process for the course. Course offerings, dates, times, deadlines and other important registration details specific to each semester are included in that semester's class listing through UAOnline (<https://uaonline.alaska.edu>). Not every course listed in this catalog is offered each semester.

It is the responsibility of the student to become familiar with UAA policies, procedures and deadlines. Refer to the academic calendar (<https://www.uaa.alaska.edu/students/registrar/calendar/index.cshhtml>) for specific deadlines. Students are expected to register only for course sections that they plan to attend and to complete all courses for which they register.

Students may register in person or use the UAOnline web registration system during the dates published in the academic calendar. Noncredit, continuing education unit (CEU), and professional development (500-

level) courses have special registrations; interested students are advised to contact the appropriate school or college for more information.

The university holds students academically and financially responsible for their registration. Students who change their plans or become unable to attend must officially drop or withdraw from their courses within published deadlines in order to avoid a final grade of F for nonattendance. Courses must be dropped within the 100 percent refund period to avoid tuition assessment. Refer to the academic calendar (<https://www.uaa.alaska.edu/students/registrar/calendar/index.cshhtml>) for specific deadlines.

All students should meet with a faculty or academic advisor prior to registering each semester. Advising can help students clarify their goals, make suitable course selections and understand academic expectations. However, the student is ultimately responsible for meeting university requirements.

Priority Registration

For fall and spring registration, UAA follows a priority schedule for the opening days of registration based on the student's class standing. Class standing is determined by total credits earned. Students can check their standing in UAOnline (<https://uaonline.alaska.edu>) on the "Check Your Registration Eligibility" screen. See the academic calendar (<https://www.uaa.alaska.edu/students/registrar/calendar/index.cshhtml>) each semester for the open registration dates. Registration will open at 12:01 a.m. to each group of students according to the schedule below.

Sequence	Class standing	Credits earned
1	Graduate Students	
2	Seniors	90+ credits
3	Juniors	60-89 credits
4	Sophomores	30-59 credits
5	Freshmen	1-29 credits
6	New applicants for degree-seeking admission	
7	Open registration (all students)	

Continuing and new degree-seeking students admitted to any UAA campus will register before non-degree-seeking students and students from other UA campuses. Summer registration opens first to all degree-seeking students and then to all others, including non-degree-seeking students.

Add, Drop and Withdrawal Deadlines for Semester-Length Courses

For fall and spring semesters, a two-week add/drop period begins on the first day of the semester. Registration for semester-length courses (15 weeks) is not permitted after the second week of the semester. Even if students have been attending class from the beginning of the course, their registration will not be accepted after the registration deadline.

Students may adjust their schedules and add or drop courses throughout the add/drop period. Some courses may require instructor approval for this activity. Caution: Dropping, withdrawing, or auditing courses

may affect eligibility for current and future financial aid. Students receiving financial aid should check with the UAA Office of Financial Aid before dropping, withdrawing or auditing a course. See Financial Aid (p. 56) for further information.

Students may withdraw from a semester-length course through the 10th week of the semester.

Students must complete business in person before 5 p.m. of the deadline day or by 11:59 p.m. via UAOnline. Please see the academic calendar (<https://www.uaa.alaska.edu/students/registrar/calendar/index.cshhtml>) for specific dates.

Add, Drop and Withdrawal Deadlines for Courses with Irregular Dates

The add/drop deadline for courses with irregular start or end dates is five business days after the published class start date.

The withdrawal deadline is the posted withdrawal deadline for that semester. For classes starting after the withdrawal deadline, students have the option to drop the class within five business days after the published class start date.

Add, Drop and Withdrawal Deadlines for Summer Courses

The add/drop deadline for any summer course will be one week after the published start date. Caution: Dropping, withdrawing, or auditing courses may affect eligibility for current and future financial aid. Students receiving financial aid should check with the UAA Office of Financial Aid before dropping, withdrawing or auditing a course. See Financial Aid (p. 56) for further information.

Faculty approval will be required for all classes after the first class meeting. Even if space is available, faculty will need to approve a student adding the class.

The withdrawal deadline is the eighth Friday of the 10-week term, and the third Friday of the first and second five-week terms. All other summer courses with a start date prior to June will be held to the first withdrawal deadline; all other summer courses with a start date on or after June 1 will be held to the second withdrawal deadline.

Waitlists

Students may waitlist for courses that are currently full through UAOnline. As space becomes available students will be notified through their preferred e-mail on a first-come, first-served basis. The timeline in which to register after notification varies from 12- 48 hours, with the time frame shortening as the term start gets closer. Students should check their preferred email daily and at least every 12 hours starting the Friday before classes begin. Students are not billed until registration is complete.

Registration by Proxy

Students unable to register in person may have a proxy register for them if they provide the proxy with a signed Proxy for Registration form. This form is available online (<https://www.uaa.alaska.edu/students/registrar/registrarforms.cshhtml>). The proxy must follow the policies and

calendar governing registration. Proxy registrations are not accepted without written permission from the student.

Auditing Classes

Audit registrations are on a space-available basis. Auditors may be dropped from a class to make room for credit-seeking students. No credit is received for audited courses. Requirements for auditing the course are determined by the faculty. Faculty may withdraw students if they fail to comply with the agreed upon terms.

Caution: Dropping, withdrawing or auditing courses may affect eligibility for current and future financial aid. Students receiving financial aid should check with the UAA Office of Financial Aid before dropping, withdrawing or auditing a course. See Financial Aid (p. 56) for further information.

Students who audit courses are required to meet prerequisites, register and pay the same tuition as those who take the courses for credit. During the first and second weeks of the semester, audit-to-credit requires faculty signature. Neither credit-to-audit or audit-to-credit changes are allowed after the second week of the semester.

Audited courses are not included in the computation of study load for full-time or part-time status. In addition, students may not request local credit by examination for an audited course until the following academic year.

Cancellation of Classes

UAA reserves the right to cancel or combine classes; to change the time, dates or place of meeting; or to make other necessary revisions in class offerings. The university may discontinue a class at any time if enrollment falls below expected levels. Students will receive notification of cancellation via e-mail.

Student-Initiated Drop or Withdrawal

Students may drop a class according to the deadlines found in the academic calendar (<https://www.uaa.alaska.edu/students/registrar/calendar/index.cshhtml>) each semester. Deadlines are determined by the start date of the class and usually occur within the first two weeks of class (for fall and spring semesters), or are prorated for trimester courses and courses other than the full semester length. No grade will be issued for classes dropped by the deadlines.

Some courses at UAA are offered in a trimester format. Students should be aware that published deadlines apply only to the traditional semester.

After the deadline for dropping a class, students may withdraw from the class through the 10th week of the semester. This will produce a designation W for the course on the cumulative transcript. After such a withdrawal, an academic grade for the course may only be obtained by retaking the course. No tuition is returned to students who withdraw from a class.

Faculty-Initiated Drop or Withdrawal

A faculty member may initiate a drop or withdrawal from a class of a student who fails to meet published individual course requirements (see next paragraph). A student who fails to attend class within the first seven calendar days of the semester start date is also eligible for this

action. The deadlines for faculty-initiated drop or withdrawal are the same as for student-initiated drop or withdrawal.

The requirements that a student must meet include all catalog prerequisites and/or corequisites for the course, as well as other registration restrictions and attendance requirements established for the course. Faculty may initiate a withdrawal for a student in audit status for a class according to agreed upon terms.

Faculty are not obligated to initiate a drop or withdrawal for any reason. Students who need to be excused from first-week attendance must contact the faculty member and receive permission before the first class meeting of the semester to avoid a possible faculty-initiated drop or withdrawal.

Request for Late Add or Retroactive Withdrawal

In the event of extenuating circumstances, a student or person with legal authority to act on behalf of a student may submit a Request for Late Add or Retroactive Withdrawal form (<https://www.uaa.alaska.edu/students/registrar/registrarforms.cshtml>). Being unaware of university procedures or deadlines or modification of the record for sake of appearance does not constitute justification for a late add or retroactive withdrawal. The university is obligated to ensure the integrity of the transcript as a historical document. Therefore, the transcript must reflect the actual history of the student's experience at the university. Requests are granted rarely and only when extenuating circumstances are documented.

1. Only requests submitted by the student or by a person with legal authority to act on behalf of the student will be considered.
2. The deadline to submit a Request for Late Add or Withdrawal Form is no later than one year following the semester end date in which the course was taken. Requests that are not received within this time frame will not be considered.
3. Requests for refunds must be applied for separately by submitting a Petition for Refund form. (<https://www.uaa.alaska.edu/students/registrar/registrarforms.cshtml>)
4. Decisions will be made solely on supporting documentation provided. In all cases a personal statement from the student is required summarizing the situation and explaining the need for an exception.
5. A request will only be approved if the requester can demonstrate unanticipated and unavoidable circumstances beyond the student's control. Work-related issues, financial hardship and failure to read UAA's documents generally do not present justifiable reasons to support an exception request.
6. Requests for reconsideration of an adverse decision must be in writing, provide additional documentation not presented in the original request and be received within 10 working days of the day the decision is mailed or otherwise distributed to the student.

Resident Credit

Resident credit at UAA is credit that is earned in formal classroom instruction, e-learning courses, directed study, independent study or research through any unit of UAA. Credit from a regionally accredited domestic institution or equivalent institution for which there is an

approved affiliation or exchange agreement is also considered resident credit.

In general, credit earned at UAF or UAS is not considered resident credit at UAA. However, if a program is delivered collaboratively with UAF and/or UAS, collaborative program credit from each participating institution is counted toward fulfillment of residency requirements.

Transfer credit, credit by placement, nontraditional credit, military service credit and credit granted through nationally prepared examinations are not considered resident credit, nor are local credit by examination credits earned through locally prepared tests.

Secondary Student Enrollment Policy

The following policy applies to all applicants 18 or younger who have not already earned their high school diplomas or GEDs. Secondary students taking courses at UAA will be building a permanent academic record at the university level. This record will follow the student throughout their career in post-secondary education and can have implications for, among other things, admission to a post-secondary institution, transfer, scholarships, and financial aid eligibility.

1. Meet all prerequisites for the courses.
2. Meet all deadlines, including but not limited to add/drop, payment and withdrawal.
3. Pay all tuition, course and student fees.
4. Adhere to UAA policies and procedures found in the UAA Catalog and UAA Student Handbook (<http://catalog.uaa.alaska.edu/handbook>).

Student and Parent/Guardian Agreement

The registration process at UAA requires all secondary school student applicants and their parents/guardians to complete a Pre-Post Secondary Student and Parent/Guardian Agreement (https://www.uaa.alaska.edu/students/registrar/_documents/Secondary%20Student%20Registration%20Process.pdf). Signing the agreement signifies understanding of and agreement to the following:

1. The university will not act in a parental or supervisory role. Any UAA-approved secondary school student under the age of 13 must be accompanied at all times and directly supervised by a parent or legal guardian while on a UAA campus;
2. A parent or guardian may not attend a course in which their secondary school student is registered unless and until the parent or guardian is also officially registered for the course. A complete copy of the Guidelines and Procedures for Children and Minors on Campus can be found in the UAA Student Handbook (<http://catalog.uaa.alaska.edu/handbook>);
3. A secondary school student who registers in university courses is fully responsible for complying with all policies and procedures of the university. This includes being aware of and adhering to the university Student Code of Conduct (p. 60) and any registration- or payment-related deadlines.
4. Regardless of age, FERPA rights are transferred to the student upon registration. Parents/guardians will not be able to conduct business

on students' behalf or access student records without the student first submitting the appropriate release form.

University Determination

The university reserves the right to deny or discontinue the enrollment of a student in a course or courses if the university determines that the student lacks the maturity, legal or intellectual ability, or academic preparedness to participate on an equal footing with other students, or if it is otherwise not in the legitimate interest of the university for the student to participate. Factors that may be considered in such a determination include, but are not limited to, the following:

1. Whether the parents (including guardians) of the student support the student's enrollment in the course;
2. Whether the course involves high-risk activities for which the university requires a release of claims of all students, in light of the fact that such a release is not enforceable as to a student under the age of 18; and
3. Whether the student can lawfully participate in the course.

Special Programs

Exceptions to the above admission and registration procedures may be made for special academic programs at the department, school, college or campus level.

Certificate and Degree Programs

Secondary school students are not eligible for admission to certificate or degree programs until they earn a high school diploma or GED or otherwise meet university admission requirements for degree-seeking students.

Transfer Credits

Where possible, transfer credit is equated with UAA courses by matching the content, level of instruction, course activities and student outcomes. Only coursework that clearly and demonstrably satisfies the intent of a UAA General Education Requirement (GER) or college or major requirement can be accepted as a substitute. When this is not possible, evaluators may grant discipline-specific elective credit at the appropriate level. UAA reserves the right to reject transfer credit or to require an examination before credit is allowed. An evaluation of transfer credit occurs after an applicant has submitted a certificate, associate or bachelor's degree Application for Admission.

Transfer credit equivalents vary among semester, unit and quarter universities. Courses that differ from equivalent UAA courses by less than 1 credit are equated to UAA courses and meet UAA course requirements without requiring a petition. To complete credit requirements where transfer course credits differ from UAA credits by more than 1 credit, students can either take another UAA class or consult an academic advisor about the academic petition (p. 25) process.

Criteria for Acceptance of Transfer Credit

1. Transfer credits from United States institutions are accepted if those institutions are accredited by the higher education commission of one of the following regional accrediting associations:

- Middle States Association of Colleges and Schools
- New England Association of Schools and Colleges
- North Central Association of Colleges and Schools
- Northwest Commission on Colleges and Universities
- Southern Association of Colleges and Schools
- Western Association of Schools and Colleges

2. Only undergraduate college-level courses completed with grades equal to C or higher are considered for transfer.
3. Credits transferred for application to graduate certificates or degrees are subject to additional requirements noted in Graduate Programs (p. 345).
4. Students who plan to transfer credits from outside the U.S. must provide an official statement of educational equivalence from World Education Services. See the Transfer Credit Evaluation page (<https://www.uaa.alaska.edu/students/registrar/transfer-evaluation/index.cshhtml>) on the Office of the Registrar's website for additional information.
5. Transfer credits are not included in the student's UAA grade point average (GPA) computation, except to determine eligibility for graduation with honors and financial aid.
6. Challenge examinations, credit by examinations, credit awarded for massive open online courses (MOOCs) and other forms of nontraditional credit will not transfer from another university's transcript. Students wishing to receive credit at UAA for these must follow Nontraditional Credit Policies (p. 39).
7. Courses from the University of Alaska Fairbanks or the University of Alaska Southeast are transferred to UAA based on applicability toward degree requirements. They are considered non-resident credits.
8. Credits from institutions that are not accredited by one of the regional associations listed above are only accepted under special arrangements that may be initiated upon student request. UAA academic departments determine unaccredited course equivalency (such as the Math Department for math courses). Students wishing to pursue such transfers must clearly establish equivalency to UAA courses using evidence obtained from course descriptions, syllabi, texts, assignments, examinations and direct communication between the departmental faculty at UAA and the originating institution.

Transfer of General Education Requirement Credits Within the University of Alaska System

The GERs for baccalaureate degrees from the University of Alaska system are required by university regulation to have a common core of coursework totaling a minimum of 34 credits. These include:

Code	Title	Credits
Category		
	Written Communication Skills	6 credits minimum
	Oral Communication Skills	3 credits minimum
	Humanities/Social Sciences/Fine Arts	15 credits minimum
	At least 3 credits in the arts	

At least 3 credits in the general humanities	
At least 6 credits in the social sciences from two different disciplines	
Quantitative Skills/Natural Sciences	10 credits minimum
At least 3 credits in mathematics	
At least 4 credits in the natural sciences, including a laboratory	
Total	34 credits minimum

Credit for coursework successfully completed at one University of Alaska institution toward fulfillment of the GERs at that institution shall transfer toward fulfillment of the same categories at all other University of Alaska institutions. This applies even if there is no directly matching coursework at the institution to which the student transfers. It should be noted that the 34-credit common core is a minimum requirement for general education. An institution may require more than 34 general education credits for its baccalaureate degrees, and transfer students must meet the total requirement at the receiving institution. Transfer of GERs beyond the 34 credits described above will be determined on the basis of individual requirements specified by university catalogs.

In its catalog, each University of Alaska institution specifies the courses that meet the GER categories at that institution and can thus be guaranteed to transfer as described above. See General Education Requirements (GERs) for Baccalaureate Degrees (p. 86) for the table of GER substitutions.

Students who have received a baccalaureate degree from UAS or UAF will be considered as having met UAA's GERs.

Admissions

www.uaa.alaska.edu/admissions (<http://www.uaa.alaska.edu/admissions>)

The University of Alaska Anchorage is an open-access public university that serves its communities through a broad range of educational opportunities. Whether taking courses to earn a certificate or degree or for personal enrichment, a student must apply as degree seeking or as non-degree seeking in order to register for courses. There are different requirements and therefore different application forms for each.

- Degree-seeking: For students planning to complete a certificate or degree program. Degree-seeking students are eligible for services like priority registration, academic advising, financial aid, etc.
- Non-degree-seeking/Guest: For personal enrichment and for secondary students wishing to take courses at UAA. Submission of transcripts is not required.

This section of the UAA Catalog includes policies regarding admission requirements, and student rights and responsibilities in the admission process that apply to all applicants. Individual certificate and degree programs may have additional requirements, selective admission criteria

or limited space. See Undergraduate Programs (p. 72) for specific undergraduate and post-baccalaureate program requirements. See Graduate Programs (p. 345) for requirements that apply to graduate programs and students. Questions about admission to UAA should be directed to Enrollment Services at (907) 786-1480 or to the student services office at your community campus.

How to Apply

Most applicants will apply using the UAA online application accessible through the Admissions website (<http://www.uaa.alaska.edu/admissions>). The online application requires payment of the application fee by credit card. The application fees are listed on the Admissions website (<http://www.uaa.alaska.edu/admissions>).

Paper applications (http://www.uaa.alaska.edu/admissions/Printed_Application_Forms.cfm) are available on request by calling or emailing the Office of Admissions. Application fees for paper applications are the same as online applications and can be paid only by check or money order. Paper applications can be dropped off at Enrollment Services, at the community campus, or mailed to the Office of Admissions address.

If the application fee poses a financial hardship, high school students may apply for an application fee waiver. A guidance counselor may submit a letter of support on school letterhead stating that the applicant is eligible for free/reduced lunch or an SAT/ACT fee waiver. See the Admissions website (<https://www.uaa.alaska.edu/admissions/how-to-apply.cshhtml>) for instructions.

Application Deadlines

Undergraduate application deadlines are as follows:

- Fall Semester - July 15
- Spring Semester - November 15
- Summer Semester - May 1

Graduate programs have varying application deadlines and applicants should carefully review the program's website. International applicants for undergraduate and graduate programs have different application deadlines that are listed on the International Student Services website.

Application for Admission After the Deadline

Applications after the deadline will be accepted with an additional \$25 late application fee. Deadlines for late applications are:

- Fall Semester - August 15
- Spring Semester - December 15
- Summer Semester - June 15

General Interest/Non-Degree-Seeking Admissions

Students who wish to take classes for general interest or personal/professional development but do not wish to earn a certificate or degree may gain registration access by completing a non-degree-seeking application.

Non-degree-seeking students may take courses for which they have the prerequisite skills and experience. They are not required to submit transcripts or test scores for admission but may need to provide proof of meeting placement requirements and course prerequisites. Students who wish to register for graduate courses may be required to obtain a department chair's or faculty member's signature and are strongly advised to contact the department at the earliest opportunity.

International students who will need a Form I-20 Certificate of Eligibility for Non-Immigrant (F-1) Student Status must be admitted as degree-seeking students. Those with certain other types of visas, including J-1, B-1 or B-2 visitor visas, F-2 visas, and those on the visa waiver program, can be admitted as non-degree-seeking and enroll in a limited number of credits. Contact the international student advisor (uaa_intlservices@alaska.edu) in the Office of Admissions for further details.

Non-degree-seeking students are not eligible to have transfer credits evaluated or applied. Students who wish to get an unofficial estimate of how their credits might transfer may visit the University of Alaska's Transfer Evaluation System (https://uaonline.alaska.edu/banprod/owa/bwsk2tcr.P_Tcs_Selmau).

Qualification for Admission

To qualify for non-degree-seeking admission, a student must meet one of the following requirements:

- Have earned a high school diploma or GED
- Be at least 18 years old
- Have completed UAA's secondary school student enrollment process (p. 47) described under Academic Standards and Regulations (p. 25)

Students initially admitted as non-degree-seeking who later decide to pursue a UAA certificate or degree must submit an Application for Admission and all required documents and meet corresponding admission requirements for the certificate or degree program. Admission as a non-degree-seeking student does not guarantee future admission to a certificate or degree program. Credits earned as a non-degree-seeking student may be applied to certificate or degree programs only as specified in admission to individual programs.

Non-degree-seeking students do not qualify for federal or state financial aid.

Graduate Admissions

All students intending to pursue a graduate certificate or degree must apply for admission. Applications for Admission are available on the Office of Admissions website (<https://www.uaa.alaska.edu/admissions>) or from Enrollment Services (<http://www.uaa.alaska.edu/onestop>).

Admission Requirements for Graduate Degrees and Certificates

To qualify for admission to the Graduate School, a student must have earned a baccalaureate degree from a regionally accredited institution

in the United States or a foreign equivalent. Students who expect to receive their baccalaureate degree within two semesters may also apply for graduate admission. Admission is granted to applicants who have received their baccalaureate degree and whose credentials indicate an ability to pursue graduate work. Applicants must either have a cumulative grade point average (GPA) of 3.00 (B average on a 4.00 scale) or meet the GPA requirements of the specific graduate program to which they are applying.

All students applying to the Graduate School for master's programs must submit official transcripts showing completion and conferral of all baccalaureate degrees and any transcripts reflecting graduate-level courses. Students applying to doctoral programs who have a previous master's degree must submit a transcript for that degree. Students applying to doctoral programs directly from an undergraduate degree must submit transcripts showing conferral of the baccalaureate degree. (Exception: Students do not need to request transcripts from any University of Alaska campus.) All U.S. and English Canadian official transcripts and credentials must be submitted by the issuing institution directly to the UAA Office of Admissions (<https://www.uaa.alaska.edu/admissions>). All final non-U.S. and French Canadian transcripts must be translated and evaluated using World Education Services (<http://www.wes.org>)(WES) Basic Course-by-Course Evaluation.

Individual graduate programs may also require additional transcripts and/or specific entrance examinations such as the Graduate Record Examination (GRE) or the Graduate Management Admission Test (GMAT). See individual program requirements for details.

Applicants whose native language is not English or whose baccalaureate degree was conferred by an institution where English was not the language of instruction must also submit official test score reports from the International English Language Testing System (<https://www.ielts.org>) (IELTS) or Test of English as a Foreign Language (<http://www.ets.org/toefl>) (TOEFL). Score reports must be sent directly from the testing agency to the UAA Office of Admissions. Student score reports are not accepted. See International Graduate Students below for more information.

Applications accompanied by appropriate fees, official transcripts and required test scores (if any) must be submitted to the Office of Admissions (<https://www.uaa.alaska.edu/admissions>). All of these materials become the property of UAA and are only released or copied for use within the University of Alaska system. Once all required transcripts and test scores have been received, the Office of Admissions will forward each student's admission packet to the dean or department chair or designee for consideration.

Admissions are undertaken by individual graduate programs, then reviewed and approved by the Graduate School. Each graduate program has individual admission standards and document requirements. Additional information such as goal statements, letters of recommendation, research proposals, writing samples and/or personal interviews may be required by specific programs. These materials must be submitted directly to the Office of Admissions and will be forwarded to the individual programs. At the time of admission, students will be assigned an advisor (see Graduate Advisor (p. 349)). All admitted

graduate students are expected to attend a formal orientation by their program before the beginning of their first semester of study.

Deadlines for submission of materials vary by program. For programs with rolling (ongoing) admissions, in order to ensure consideration for all financial aid opportunities, it is strongly recommended that eligible students submit:

- For fall admission: all required application forms no later than June 15, and all other required application materials by August 1;
- For spring admission: all required application forms no later than November 1, and all other required application materials by December 1.

Application and Admission Status Definitions

Application Status

- **Incomplete Application:** An incomplete application is one that is not accompanied by all required documents; generally an application is considered incomplete until all required official transcripts and test scores have been received.
- **Pending Application:** A pending application has met university requirements and is awaiting departmental recommendation for admission.
- **Postponed Application:** Students may postpone their applications to a future semester by notifying the Office of Admissions prior to the end of the semester for which they originally applied.
- **Withdrawn Before Admission:** Students must complete or postpone their admission by the end of the semester for which they have applied. At the end of each semester, all applications still incomplete or not postponed will be withdrawn. Students whose applications have been withdrawn must re-apply for admission if they later choose to attend UAA.

Admission Status

- **Complete Admission:** All required documents have been received and all admission standards met.
- **Incomplete Admission:** Students who expect to receive their baccalaureate or master's degree from a regionally accredited institution within two semesters (three if including summer) may apply for graduate admission. Formal acceptance becomes final only after the baccalaureate or master's degree is completed and conferred, and all other admission requirements are met. All admission requirements must be satisfied prior to advancement to candidacy.
- **Provisional Admission:** Students who show potential for success in graduate studies but do not meet all the admission requirements for a program may be provisionally admitted. Provisions and deadlines for meeting those provisions are established at the time of admission and are monitored by the department chair or designee and the Graduate School. Normally, such provisions are to be satisfied within one academic year. If the provisions are not met within the specified deadlines, the student may be removed from graduate degree-seeking status. If the provision is met, the department will indicate the completion on a copy of the Graduate Admission Recommendation Form (GARF) and submit to the Graduate School for final approval.

- **Postponed Admission:** Upon approval by their program and the Graduate School, students may postpone their admission to a future semester once for up to one year prior to the end of the semester for which they originally applied.
- **Withdrawn After Admission:** Admission will be withdrawn when students do not attend classes during or postpone their admission before the end of their admission semester. Students whose admissions have been withdrawn must re-apply for subsequent admission to UAA.

International Graduate Students

International students who intend to reside in the U.S. for the purpose of pursuing a certificate or degree as F-1 visa students and need a form I-20 Certificate of Eligibility for Non-immigrant F-1 Student Status must meet university and degree program admission requirements and submit the following:

1. Official TOEFL (minimum score of 79-80 IBT) or IELTS (minimum score of 6-6.5) scores, completed within the last two years and sealed by the issuing agency. International students may request an exception from the language exam requirements if they:
 - a. are a native speaker of English, or
 - b. have earned a bachelor or master's degree from a regionally accredited U.S. institution.
2. A notarized affidavit of financial support from the student or the student's financial sponsor and documentation of financial resources to cover one full academic year of study.
3. A completed Admissions Agreement for Prospective F-1 Students.

Alternate documentation of English proficiency may be considered on a case-by-case basis and approved by the program faculty and dean of the college.

The University reserves the right to require additional English proficiency evidence, even from those who are eligible for an examination exemption.

Students who earned their baccalaureate degree outside the U.S. or English-speaking Canada must submit a Basic Course-by-Course Evaluation from World Education Services (WES), stating that they have earned the equivalent of a U.S. baccalaureate degree. Evaluations should be sent directly to the UAA Office of Admissions, P.O. Box 141629, Anchorage, AK 99514-1629.

Students who have earned multiple bachelor degrees or already hold an advanced degree should contact the program to which they are applying to determine if a WES ICAP is needed for all institutions attended. In some cases, an evaluation only for the previous study most relevant to their UAA program will be needed. These decisions are made by the program faculty and approved by the dean of the college.

Students transferring from other institutions in the U.S. must also complete and submit the F-1 Transfer Eligibility Form.

International students in F-1 visa status must be formally admitted, full-time, degree-seeking students. Health insurance is mandatory.

Visit the International Student Services (<http://www.uaa.alaska.edu/iss>) website for details and forms.

Western Regional Graduate Program

Students from Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington and Wyoming may be eligible for resident tuition through the Western Regional Graduate Program (WRGP). This program is for students doing graduate work in clinical-community psychology, early childhood special education, global supply chain management, nursing science, project management and social work. For more information, visit the Graduate School (<http://www.uaa.alaska.edu/graduateschool>) website.

Post-Baccalaureate Admissions

Admission Requirements for Post-Baccalaureate Certificates

To qualify for admission to post-baccalaureate certificate programs, a student must have earned a baccalaureate degree from a regionally accredited institution in the United States or a foreign equivalent. Students who expect to receive their baccalaureate degrees within two semesters may also apply for admission. Applicants must meet the grade point average (GPA) requirements of the specific certificate program to which they are applying.

All certificate students must submit official transcripts showing completion and conferral of all baccalaureate degrees and any transcripts reflecting any courses relevant to the certificate sought. Transcripts are to be requested by the student and must be submitted in an officially sealed envelope. (Exception: Students do not need to request transcripts from any University of Alaska campus.) Some baccalaureate programs have additional or more selective admission requirements. See individual program requirements later in this chapter for details.

All U.S. and English Canadian official transcripts and credentials must be submitted by the issuing institution directly to the UAA Office of Admissions (<https://www.uaa.alaska.edu/admissions/contact-admissions.cshtml>). All final non-U.S. and French Canadian transcripts must be translated and evaluated using World Evaluations Service's (<http://www.wes.org>)(WES) International Credential Advantage Package (ICAP) Course-by-Course Evaluation.

Each certificate program has individual admission standards and requirements such as writing samples, goal statements, letters of recommendation, research proposals and/or interviews.

Applications, official transcripts, required test scores (if any) and any additional documents must be submitted to the Office of Admissions (<https://www.uaa.alaska.edu/admissions/contact-admissions.cshtml>). All of these materials become the property of the University of Alaska Anchorage and are only released or copied for use within the University of Alaska system. Once all required transcripts and test scores have been received, the Office of Admissions will forward admission files to the dean, department chair or designee for consideration.

Deadlines for submission of materials vary by program. No more than 9 credits may be completed in the student's certificate program before program admission. See individual program listings for information. Please note, for programs with rolling (ongoing) admissions, in order to ensure consideration for all financial aid opportunities, it is strongly recommended that eligible students submit:

- For spring admission, all required application forms no later than November 1, and all required application materials by December 1;
- For summer admission, all required application forms no later than May 1, and all required application materials by July 1;
- For fall admission, all required application forms no later than June 15, and all required application materials by August 1.

International Post-Baccalaureate Certificate Students

International students who intend to reside in the United States for the purpose of pursuing a UAA certificate as an F-1 visa student and who need a Form I-20 Certificate of Eligibility for Non-Immigrant F-1 Student Status, must fully meet University and program admission requirements before a Form I-20 will be issued.

International students in F-1 visa status must be formally admitted, full-time, degree-seeking students. Health insurance is mandatory. Visit the International Student Services web site (<http://www.uaa.alaska.edu/iss>) for details and forms.

Application and Admission Status Definitions for Post-Baccalaureate Certificate-Seeking Students

Application Status

- **Incomplete Application:** An incomplete application is one that is not accompanied by all required documents; generally, an application is considered incomplete until all required official transcripts and test scores have been received.
- **Pending Application:** A pending application has met university requirements and is awaiting departmental recommendation for admission.
- **Postponed Application:** Students may postpone their applications to a future semester by notifying the Office of Admissions prior to the end of the semester for which they originally applied.
- **Withdrawn Before Admission:** Students must complete or postpone their admission by the end of the semester for which they have applied. At the end of each semester, all applications still incomplete or not postponed will be withdrawn. Students whose applications have been withdrawn must re-apply for admission if they later choose to attend UAA.

Admission Status

- **Complete Admission:** All required documents have been received and all admission standards met.
- **Incomplete Admission:** Students who expect to receive their baccalaureate from a regionally accredited institution within two semesters (three if including summer) may apply for post-baccalaureate admission. Formal acceptance becomes final only

after the baccalaureate degree is completed and conferred, and all other admission requirements are met.

Secondary Student Admissions

Secondary (high school) students interested in taking UAA courses for credit while still in high school should follow the procedures (p. 47) in Academic Standards & Regulations (p. 25).

Undergraduate Admissions

UAA offers the following undergraduate degree types: Occupational Endorsement Certificate, Certificate, Associate and Baccalaureate Programs. Below is information about program qualifications, application and admission.

Admission Status Definitions

- **Admitted:** All required documents have been received and all admission standards met. Students can receive any financial aid for which they are eligible in admitted status and register for future terms.
- **Admitted Incomplete (Accepted):** In-progress transcripts have been received, but the final high school or college transcripts are still missing.
 - Applicants may enroll for their first semester while in this status, but cannot register for a subsequent semester.
 - Applicants who have not provided all required documents before registration for the following semester will have their application for admission withdrawn. Students cannot receive financial aid while in this status.
- **Postponing Application:** Applicants who do not attend may postpone the application once for up to one year by notifying the Office of Admissions prior to the deadline.
- **Withdrawing Application:** Applications will be withdrawn if applicants:
 - do not attend classes during the semester for which they applied or postpone their application by the deadline, or
 - do not provide all required documents before registration for the following term.

Program Qualifications

Occupational Endorsement Certificate

To qualify for admission to an OEC program, a student must meet one of the following requirements:

- Have earned a high school diploma or U.S. GED, or
- Meet one of the options under Admission for Non-High School Graduates.

Not all OEC programs are approved for financial aid (see Undergraduate Programs (p. 72) for specific information).

Associate and Certificate Programs

To qualify for admission to an undergraduate certificate or associate degree program, a student must:

- Have earned a high school diploma or U.S. GED, or meet one of the options under Admission for Non-High School Graduates.

There is no minimum grade point average (GPA) requirement for certificate and associate level admission.

Baccalaureate Programs

To qualify for admission to baccalaureate programs, a student must:

- Have earned a high school diploma or U.S. GED, or meet one of the options under Admission for Non-High School Graduates or Special Information for Home School Applicants.
- High school GPA of at least 2.50 or
- Cumulative college GPA of at least 2.00 (must have 24 earned credits).

Applicants not meeting the GPA requirements above may be admitted to certain baccalaureate programs on probation.

- High school graduates with a GPA of 2.00 through 2.49
- Transfer students with a collegiate GPA of 1.75 through 1.99.

Applicants with lower GPAs will be offered admission to the Associate of Arts program.

- * *For students in high school at the time of application, the admission decision will be based on the high school GPA. If the student has more than 24 college-level credits and would like to have the college GPA reviewed as part of the admission process, contact the Office of Admissions. Transcripts for all college-level coursework are required to complete the application file.*
- Some programs have additional admission requirements, selective admission criteria or limited space. See Undergraduate Programs (p. 72) for specific program information.*

Applying for Admission

To apply for admission to a undergraduate program, please submit the following:

1. A ([https://uaonline.alaska.edu/banprod/owa/bwskalog.P_DisplLoginNon\)pplication](https://uaonline.alaska.edu/banprod/owa/bwskalog.P_DisplLoginNon)pplication) for admission (<https://www.uaa.alaska.edu/admissions/how-to-apply.cshtml>)
2. Non-refundable application fee (<https://www.uaa.alaska.edu/admissions/how-to-apply.cshtml>)
3. High school transcript or U.S. GED scores (required for applicants with fewer than 24 college-level credits earned at a regionally accredited institution)*
 - a. Applicants in high school at the time of application should submit a current in-progress transcript. An official final transcript showing a graduation date is required after graduation. Home school applicants should review the Home School Applicant - Special Instructions below.
 - b. Students who did not graduate from high school or do not hold a GED should refer to the Admission for Non-High School Graduates below.

4. College or university transcripts from all regionally accredited or foreign institutions attended (except University of Alaska campuses)**. This is required of all applicants who have completed at least one college-level course.
 - a. Students currently in college should submit a current or in-progress transcript at the time of application.
 - b. An official final transcript is required after completion of the term or graduation showing final grades and/or a graduate date;
 - c. The Office of Admissions will automatically retrieve records for courses taken at other University of Alaska campuses and via University of Alaska distance education.

An Undergraduate Application for Admission is complete when all required items listed above are received. An initial admission decision will be made once in-progress transcripts are received and reviewed by the Office of Admissions. Official final transcripts are required to bring applicants to the Complete Admission status so the student can receive financial aid for which they may be eligible and register for more than one semester***.

Test scores are not used as part of the admissions decision for most programs. The University of Alaska uses placement exams as part of UAA's advising and registration process to determine course placement. Scores should be sent to the UAA Office of Admissions (<https://www.uaa.alaska.edu/admissions/how-to-apply.cshtml>) directly from the testing agency. UAA will not accept copies of student score reports.

All transcripts, test scores and other supporting documents submitted for admission or transfer credit evaluation become the property of the University and are only released or copied for use within the University of Alaska system. They cannot be reissued, copied or returned to the student.

For more information about US and International transcripts see Transcripts.

Students must enroll in courses and attend during the semester in which they are admitted.

Home School Applicants - Special Instructions

UAA welcomes applicants from home school environments. UAA can accept transcripts from home schools that meet the requirements of their state department of education.

Applicants from home schools within the state of Alaska should submit an official transcript that includes:

- the name and physical address of the home school or a school affiliated organization,
- all course work, credits and grades earned,
- educator's signature,
- graduation date on a final transcript or anticipated graduation date on a partial transcript.

Applicants from home schools outside Alaska must provide:

- an official transcript as described above,
- the home school requirements of their state department of education, and
- proof that the home school meets their state's requirements.

UAA cannot research applicable rules and compliance in each state. If this documentation is not available or an applicant does not meet the home school admission requirements, UAA offers several alternative paths to admission. For more information, see section Admission for Non-High School Graduates.

Non-High School Graduates - Special Instructions

UAA has three paths to admission for applicants who have not graduated from high school:

1. Provide proof of high school graduation equivalency. UAA accepts U.S. GED, HiSET, or a high school equivalency test that is recognized by the state in which the applicant resides.
2. Pass an Ability to Benefit test administered by the UAA Testing Center (<https://www.uaa.alaska.edu/students/testing/index.cshtml>). Applicants admitted with the Ability to Benefit will be eligible for financial aid only if they have completed at least 6 hours of college-level coursework before July 1, 2012.
3. Provide an academic transcript documenting successful completion of an Associate of Arts program.

International Students - Special Instructions

International students who intend to reside in the United States for the purpose of pursuing a UAA certificate or degree as an F-1 visa student and who need a Form I-20 Certificate of Eligibility for Non-Immigrant F-1 Student Status, must fully meet University and program admission requirements before a Form I-20 will be issued.

International students in F-1 visa status must be formally admitted, full-time, degree-seeking students. Health insurance is mandatory. Visit the International Student Services web site (<http://www.uaa.alaska.edu/iss>) for details and forms.

To qualify for admissions as an international student:

1. Fulfill the UAA application requirements for the selected program of study.
 - a. All non-U.S. and French Canadian transcripts must be translated and evaluated using World Education Service's (<http://www.wes.org>)(WES) International Credential Advantage Package (ICAP) or Basic Course-by-Course Evaluation.
 - b. All U.S. and English Canadian official transcripts and credentials must be submitted by the issuing institution directly to the UAA Office of Admissions (http://www.uaa.alaska.edu/admissions/contact_us.cfm).
2. Meet the following English language proficiency standards:
 - a. A TOEFL score of 71, or
 - b. An IELTS score of 6.0, or
 - c. Have an approved exemption from the English language proficiency standards.
3. Submit an Affidavit of Financial Support (<http://www.uaa.alaska.edu/international-student-services/forms>) from

the student or the student's financial sponsor and documentation of financial resources to cover one full academic year of study. Loss of financial sponsorship while enrolled at UAA may result in the student being advised to exit the U.S.

4. Students transferring from other institutions in the U.S. must complete the F-1 Transfer Eligibility Form (<https://www.uaa.alaska.edu/students/international-student-services/forms.cshhtml>).

Official test score reports from the International English Language Testing System (<https://www.ielts.org>) (IELTS) or Test of English as a Foreign Language (<http://www.ets.org/toefl>) (TOEFL) must be sent directly from the testing agency to the UAA Office of Admissions. Student score reports are not accepted.

International students may request an exemption from the language exam requirements if they:

- have earned a bachelor's or master's degree from a regionally-accredited U.S. institution.
- have earned a grade of C or better in a course equivalent to WRTG A111 or higher at a regionally accredited U.S. institution, or
- are a native speaker of English.

The Office of Admissions reserves the right to require additional English proficiency evidence, even from those who are eligible for an examination exemption.

UAA may not issue an I20 to International students that have previously not made satisfactory academic progress or based on their current immigration status.

All academic credentials, WES transcript evaluations, affidavits of support and financial documentation should be sent directly to the UAA Office of Admissions, 3211 Providence Dr., Anchorage, AK 99508.

Transcripts

Transcripts are required for most types of admissions. Transcripts are acceptable only if the school is accredited through a regional accrediting agency, affiliated with an accredited high school or registered with the state. If the high school does not meet the requirements above refer to Home School Applicants - Special Information.

It is the applicant's responsibility to request required transcripts. The UAA Office of Admissions cannot request transcripts from high schools or other colleges or universities.

Definitions:

- **In-Progress Transcript:**
 - High School - Applicants applying during their senior year of high school should submit a current in-progress transcript at the time they apply for admission. An unofficial transcript is acceptable. These transcripts will be used to make an initial admission decision. An official final high school transcript showing a graduation date must be sent immediately after high school graduation. Please see Final High School Transcripts below.

- College - Applicants applying while studying at another university should submit a current in-progress transcript at the time they apply for admission. This needs to be an official transcript sent directly from the college/university. These transcripts will be used to make an initial admission decision and confer transfer credit. An official final college transcript showing all grades must be sent immediately after the end of the college/university term. Please see Final College Transcripts below.

- **Final High School Transcript:** An official final high school transcript shows the applicant's graduation date.
- **Final College Transcript:** An official college transcript has all grades and degrees posted.
- **Official:** Provided by the issuing institution in a sealed envelope or through a secure electronic transcript provider.
- **Unofficial:** Provided by the student.
- **Transcripts from all non-U.S. and French Canadian institutions** must be translated and evaluated using World Education Service's (<http://www.wes.org>)(WES). College transcripts need Basic Course-by-Course Evaluation or International Credential Advantage Package (ICAP). High School transcripts need a Document-by-Document Evaluation.
- **University of Alaska (UA) System Transcripts:** Students transferring from the University of Alaska Fairbanks, the University of Alaska Southeast or one of their community campuses do not need to submit transcripts from these institutions. The Office of Admissions will automatically retrieve records from courses taken at other UA campuses and via UA distance education.

Applicants currently enrolled in high school or another college or university at the time they apply for admission must submit a copy of their official final transcript(s) immediately after they become available in order to complete the admissions process and to receive financial aid for which they may qualify.

Any substantial change in academic performance, failure to finish the term or failure to graduate may lead to revocation of admission to UAA. This will also lead to the immediate termination of financial aid.

Send final transcripts to the UAA Office of Admissions (<https://www.uaa.alaska.edu/admissions/how-to-apply.cshhtml>) electronically, via mail or via courier service. Hand-carried transcripts must be in the original sealed envelope from the issuing institution. Faxed transcripts are not accepted as final transcripts.

UAA may request additional documents in cases where there are a large number of credits are taken at a institution other than one granting the degree. Transcripts and/or foreign evaluations from the institution where a significant amount of coursework is completed may be requested and utilized in the admission decision.

All transcripts, test scores and other supporting documents submitted for admission or transfer credit evaluation become the property of the University and are only released or copied for use within the University of Alaska system. They cannot be reissued, copied or returned to the student.

General Undergraduate Admission Information

Pre-Majors/Exploratory Majors

Students applying to programs with selective admission criteria or limited space may initially be admitted to a pre-major status. Admission to pre-major status does not guarantee subsequent admission to the major. Students are advised to contact their program advisor at the earliest opportunity for further information about the program's special requirements and for guidance in selecting appropriate preparatory classes.

Students admitted to pre-major status must satisfy all requirements for formal admission to the major and then complete the change of major (<http://www.uaa.alaska.edu/records/registrarforms.cfm>) process. Such changes will not affect a student's degree requirements or catalog year.

Students admitted to the exploratory major must satisfy all requirements for formal admission to a major and then complete the change of major (<http://www.uaa.alaska.edu/records/registrarforms.cfm>) process. A change of major from the exploratory major to an official degree or certificate program will initiate a new catalog year.

Change of Major, Degree, Admission Level and Concurrent Degrees

Once formally admitted and in attendance, students may request a change of major, or change degree programs at the same level or a lower level, to another program through the change of major (<https://www.uaa.alaska.edu/students/registrar>) process. Students admitted initially in the exploratory major may also declare a major through this process. Students must meet the specific admission requirements of the desired program and follow the change of major (<https://www.uaa.alaska.edu/students/registrar>) process. No fee is required for this process.

To change from a baccalaureate level program to a certificate/associate level program, a student must follow the change of major (<https://www.uaa.alaska.edu/students/registrar>) process. If a student later decides to complete a baccalaureate program, he or she will need to reapply for admission and pay applicable admission fees.

To change from a certificate/associate level program to a baccalaureate level program, a student must reapply for admission and meet all the requirements for the new admission level.

Students may pursue concurrent UAA degrees as long as they have formally applied and been accepted to each program. For more information, see Undergraduate Policies (p. 85).

Attendance

Students must enroll in courses and attend during the semester in which they are admitted. Applications for those not in attendance or postponed will be withdrawn.

Length of Admissions

Once formally admitted and in attendance,* students remain admitted to the institution:

- as long as the catalog is active, and
- there is not a break in attendance of 2 years, and
- they have not been academically disqualified.

For more information, see Change of Major or Degree, or Returning to UAA After a Break in Enrollment.

Returning to UAA After a Break in Enrollment

Undergraduate students who discontinue their enrollment at UAA for two years or less remain admitted and may register for courses during normal registration periods. If applicable, they must submit official transcripts from institutions attended during their absence for transfer credit evaluation.

Admission to the University and academic program(s) is automatically canceled for undergraduate students who do not attend UAA for two years or more. To return to UAA, students must complete a new application for admission and, if admitted, will be required to follow the program and graduation requirements under the new catalog year.

Reapplying After Academic Disqualification or Removal from Program

Procedures for students academically disqualified can be found under Academic Standing (p. 28).

Students must enroll in courses and attend during the semester in which they are admitted.

Advising and Academic Support

Academic advising guides students in developing plans for timely progression toward certificate and/or degree completion. Advising also engages students in the developmental process of clarifying academic, career and life goals consistent with students' interests, values and abilities. Through meetings with advisors, students also learn about campus and community resources that promote student success.

Detailed information on advising requirements, locations and advisor assignments can be found through each campus' advising website, as follows:

- UAA Anchorage (<https://www.uaa.alaska.edu/students/advising>)
- Kenai Peninsula College (http://www.kpc.alaska.edu/academics/academic_resources/academic_advising)
- Kodiak College (<http://www.koc.alaska.edu/students/student-services/advising/index.cshhtml>)
- Matanuska-Susitna College (<http://matsu.alaska.edu/office/student-services/academic-advising>)
- Prince William Sound College (<http://pwsc.alaska.edu/academic-resources>)

Financial Aid

(907) 786-1480

www.uaa.alaska.edu/students/financial-aid (<http://www.uaa.alaska.edu/students/financial-aid>)

Financial aid is available to qualified students at the University of Alaska Anchorage. Financial aid is any grant, scholarship, employment opportunity or loan with the express purpose of assisting students with expenses related to their education. The main sources of financial aid are the federal government, state government, private organizations and the University of Alaska. Types and amount of financial aid vary according to federal and state guidelines, student needs, and availability of funds. For detailed descriptions of available financial aid programs, eligibility requirements and application procedures, please visit the Office of Financial Aid website (<https://www.uaa.alaska.edu/students/financial-aid>).

Federal Financial Aid Application Procedures

Students interested in receiving financial aid to help fund their UAA education should apply at least six months before the beginning of the semester for which they plan to attend in order to allow sufficient processing time. Basic procedures are as follows:

1. New students must apply for admission to UAA through the Office of Admissions (<https://www.uaa.alaska.edu/admissions>) by the appropriate deadline.
2. Submit a Free Application for Federal Student Aid (<http://www.fafsa.gov>) (FAFSA) online. Be sure to include UAA's school code: 011462.
3. Submit any additional documentation, if requested, to the Office of Financial Aid (<https://www.uaa.alaska.edu/students/financial-aid>). The U.S. Department of Education and the Office of Financial Aid selects certain applicants for a verification process. Students selected for verification must submit requested documents; if they are not received, federal financial aid cannot be awarded. Certain types of state and institutional aid also require verification to be complete before awarding and/or disbursement can occur.
4. Students who wish to apply for UAA scholarships may complete an online application available on UAOnline (<https://uaonline.alaska.edu>).
5. Students who wish to apply for Bureau of Indian Affairs (<http://www.bia.gov>) grants or scholarships should contact the BIA or their Native regional corporation for applications.
6. For more detailed instructions, see the financial aid checklist (<https://www.uaa.alaska.edu/students/financial-aid/checklist.cshhtml>) available from the Office of Financial Aid.

Financial Aid Eligibility

To receive most financial aid, including all federal aid, a student must:

1. Be fully admitted to an eligible degree or certificate program;
2. Demonstrate financial need for federal assistance as determined by the FAFSA (except for certain loan programs);
3. Meet satisfactory academic progress (<https://www.uaa.alaska.edu/students/financial-aid/satisfactory-academic-progress/sap.cshhtml>) as defined by student financial aid regulations;
4. Have a high school diploma or its equivalent;
5. Be a U.S. citizen or eligible noncitizen;
6. Have a valid Social Security number;
7. Register with Selective Service, if required;

8. Certify that they are not in default on a federal student loan and do not owe money on a federal student grant;
9. Certify that they will use federal student aid only for educational purposes; and
10. Enroll in degree-applicable credits.

Types of Financial Aid

www.uaa.alaska.edu/students/financial-aid/aid-types.cshhtml (<https://www.uaa.alaska.edu/students/financial-aid/aid-types.cshhtml>)

Grants

Grants are financial aid awards that do not need to be repaid as long as the student meets academic progress requirements of the granting agency.

Federal Pell Grant

The Federal Pell Grant makes funds available to eligible students with financial need. In addition to the eligibility criteria above, to be eligible for a Federal Pell Grant, students must not have earned their first baccalaureate degree or have used more than 12 full-time equivalent semesters of Federal Pell Grants during their lifetime.

Federal Supplemental Educational Opportunity Grant (FSEOG)

The FSEOG program is similar to the Federal Pell Grant program and can provide additional assistance to students with financial need and who are eligible for the maximum Federal Pell Grant. FSEOG funds are limited, so we encourage students to submit their FAFSA as early as possible.

University of Alaska Completion Grant

The UA Completion Grant provides assistance to undergraduate students to facilitate and incentivize accelerated graduation. Students will be awarded based on their financial need, enrollment and progress toward degree.

Alaska Education Grant (AEG)

AEG is a need-based grant offered by the State of Alaska. The deadline to apply is June 30th. Funding is limited, so we encourage students to apply as early as possible. For more information, including eligibility criteria, visit ACPE's website (http://acpe.alaska.gov/FINANCIAL_AID/Grants_Scholarships/Alaska_Education_Grant).

Bureau of Indian Affairs (BIA)

The BIA makes grants available to eligible full-time students. Applicants must be at least one-quarter Alaska Native or American Indian. For further information, contact the local BIA area office or the Native regional corporations.

Scholarships

Institutional Scholarships

Scholarships are usually awarded for academic achievement or talent. Students interested in applying for institutional scholarships should do so via UAOnline (<https://uaonline.alaska.edu>). Students should visit the UAA scholarship website (<https://www.uaa.alaska.edu/students/financial-aid/scholarships>) for additional information and to view scholarship listings. The

majority of scholarships at UAA have an application deadline of February 15 for the upcoming school year. Students should also check with their academic department regarding departmental scholarship opportunities.

Alaska Performance Scholarship (APS) (http://acpe.alaska.gov/FINANCIAL_AID/Grants_Scholarships/Alaska_Performance_Scholarship)

The APS is a state scholarship that provides an opportunity for Alaska high school students to receive help covering the cost of an Alaska postsecondary education. Alaska high school students who take a rigorous curriculum, get good grades and score well on college placement or work ready exams can earn an APS for use at UAA. Students can receive the APS for a maximum of eight semesters within six years of graduation from high school. Continued eligibility is based on academic progress, enrollment status, other need-based financial aid resources, cost of attendance and minimum GPA requirements. Students must complete a FAFSA every academic year by the state's June 30 deadline.

Private Scholarships

Private scholarships are provided by donors outside of the university. Such awards may range from a few hundred dollars given by a local service organization to several thousand dollars awarded by a foundation. The Internet is one of the best ways to find private scholarship opportunities. There are free scholarship search engines and private scholarship opportunities listed on UAA's scholarship website (<https://www.uaa.alaska.edu/students/financial-aid/scholarships/private.cshtml>).

Student Employment

The University of Alaska provides employment opportunities for qualified students. Student employment will normally not exceed 20 hours per week during a semester. For information on eligibility criteria for student employment, refer to the UAA Student Employment Guidelines and Procedures (https://www.uaa.alaska.edu/students/_documents/uaa-student-employment-guidelines-and-procedures.pdf).

Federal Work-Study Program (<https://www.uaa.alaska.edu/students/financial-aid/federal-work-study.cshtml>)

The Office of Financial Aid awards federal work-study to eligible students who express interest on the FAFSA. Federal work-study is based on financial need, as determined by the FAFSA. *Students offered federal work-study are not guaranteed employment.* Available employment positions are posted on alaska.edu/jobs and students must use this website to apply for the work-study positions that they are interested in. There is usually no work-study money appropriated for the summer. All summer student employee jobs are primarily department-funded.

Career Services Center (CSC)

Students seeking employment off campus can find opportunities through the CSC. Government, corporate and private sector employers contact the CSC daily to post job opportunities. Student internships may also be obtained through CSC. Through its student internship services, the CSC provides qualified students the opportunity to earn credit in their major while gaining work

experience in a paid position. This service provides guidance to students through developed learning objectives and faculty participation. For more information, see the CSC website (<http://www.uaa.alaska.edu/careerservices>) or call (907) 786-4513 or the hotline at (907) 786-4545.

Human Resource Services (HRS)

HRS advertises full-time, part-time, regular, term and temporary positions at UAA on alaska.edu/jobs (<https://alaska.edu/jobs>).

Applicants needing reasonable accommodations to participate in the application or interview process should contact the recruitment manager in HRS at (907) 786-4608.

Graduate Assistantships

Minimum qualifications for graduate assistantships are a baccalaureate degree from a college or university of recognized standing with a grade point average (GPA) of at least 3.00 (B) and formal admission to a UAA graduate program. Foreign students whose native language is not English must score at least 600 overall on the Test of English as a Foreign Language (TOEFL) and at least 190 on the Test of Spoken English.

Graduate assistants are assigned responsibilities requiring approximately 20 hours per week. They receive stipends of varying amounts. Semester tuition scholarships may also be available based on full-time attendance (9 credits). Graduate assistantships are awarded in spring for the upcoming academic year. For additional information and applications, contact the appropriate dean's office.

Loans (<https://www.uaa.alaska.edu/financialaid/loaninfo>)

Student loans are designed to help students pay for educational costs such as tuition, fees and related living expenses. As with any loan, students should be conservative and only borrow what they absolutely need. Student loans must be repaid with interest, under the terms of the master promissory note (MPN). Education loans come in three major categories: federal student loans, federal loans for parents, and private alternative loans. For more information on student loans, visit the \$avvy Seawolf Loan Zone website (<https://www.uaa.alaska.edu/students/financial-aid/financial-literacy/loan-resource-page.cshtml>).

Federal Direct Loans

The Direct Loan Program enables students to borrow directly from the U.S. Department of Education. To qualify, a student must complete the FAFSA. Students must be enrolled at least half-time in order to receive a disbursement. Other eligibility requirements are listed on the Office of Financial Aid website (<https://www.uaa.alaska.edu/students/financial-aid/aid-types.cshtml/#Federal%20Direct%20Loans>).

- **Federal Subsidized Student Loan:** This is a need-based loan in which the federal government pays the interest while the student is attending postsecondary education at least half-time and for six months after graduation or after the student leaves school. There are annual and aggregate (i.e., lifetime) limits (<https://www.uaa.alaska.edu/students/financial-aid/financial-literacy/loan-resource-page.cshtml/#loanlimits>) on subsidized student loans, including a limit on students receiving subsidized loans for a time

period greater than 150% of the time required to complete their degree program.

- **Federal Unsubsidized Student Loan:** This loan is not a need-based loan, meaning that all eligible students qualify regardless of financial need. Interest accumulates on these loans from the time they are disbursed to the student's account. There are annual and aggregate (i.e., lifetime) limits (<https://www.uaa.alaska.edu/students/financial-aid/financial-literacy/loan-resource-page.cshhtml/#loanlimits>) on unsubsidized student loans.
- **Federal Direct PLUS Loan for Graduates:** PLUS loans are federal loans that graduate or professional degree students can use to help pay educational expenses. The maximum loan amount is the student's cost of attendance minus other financial aid received.

Federal Direct Parent PLUS Loans

Parents can borrow for their dependent student's educational costs. The maximum loan amount is the student's cost of attendance minus other financial aid received. Completion of the FAFSA is required to borrow a PLUS loan. The interest on the PLUS loan begins to accrue with disbursement. Payments usually begin 60 days after the loan is fully disbursed.

Alternative Private Loans

An alternative private loan is a personal loan from a bank that is used for educational expenses. These loans are often used as a supplement to a student's existing financial aid package so Federal Direct Loans should be maximized before applying for an alternative private loan. Many alternative loans may be deferred until graduation; some may require interest payments while the student is still enrolled. Interest rates, origination fees, repayment options, and other terms and conditions of alternative private loans will vary so it's important that students research alternative private loan options carefully. Once a lender is selected, the student must complete an application and MPN for each alternative loan requested.

Emergency Loan Fund (ELF)

Thirty-day loans are available to students who can document extenuating need. An admitted full-time student making satisfactory progress may borrow a maximum of \$600 for up to 30 days. A \$10 administrative fee is charged. Students may receive one ELF per semester subject to the approval of the Office of Financial Aid and the Accounting Services Financial Aid Disbursements office.

Satisfactory Academic Progress (SAP)

In order to receive financial aid from any of the federal, state or institutional aid programs, a student must maintain satisfactory academic progress (SAP). SAP requirements include minimum cumulative GPAs, minimum cumulative completion ratios, and completion of a degree or certificate within a maximum time frame.

For more information and specific requirements view the complete SAP policy (<https://www.uaa.alaska.edu/students/financial-aid/satisfactory-academic-progress/sap.cshhtml>).

Financial Aid SAP Appeal Policy

Students with extenuating circumstances who wish to appeal for reinstatement of their financial aid must provide sufficient evidence to support their assertion that unusual circumstances prevented them from maintaining satisfactory academic progress. As part of the appeal process, students must meet with an academic advisor and have a degree plan created. If the appeal is approved, the student is placed on financial aid probation and must comply with the requirements of their academic plan, which includes maintaining a 100 percent term completion ratio (i.e., successfully completing all classes attempted) and a term GPA over 2.00 for undergraduate students or 3.00 for graduate students. Failure to meet the terms of this academic plan will result in the loss of financial aid eligibility.

For more information, visit the SAP Appeal website (http://www.uaa.alaska.edu/students/financial-aid/satisfactory-academic-progress/sap_appeal_information.cshhtml).

Return of Federal Financial Aid Policy

Students earn a portion of their financial aid every day they're enrolled in the semester. Students who withdraw from all classes prior to completing over 60 percent of the semester will have their financial aid eligibility recalculated based on the percent of the term completed. For example, a student who totally withdraws after completing only 30 percent of the term will have "earned" only 30 percent of any federal financial aid received. The school and/or the student must return the remaining 70 percent. A student thinking about withdrawing from classes should contact the Office of Financial Aid to see how the withdrawal will affect their current and future aid eligibility.

Students who drop all of their courses before the end of the add/drop period (also known as the financial aid census date) are not eligible for any financial aid unless they submit documentation of their attendance certified by their instructors.

For more information see the Total Withdrawal policy on the Financial Aid Policies website (<http://www.uaa.alaska.edu/students/financial-aid/policies.cshhtml/#total-withdrawal>).

Military & Veterans Student Services

(907) 786-6962

www.uaa.alaska.edu/students/veterans (<http://www.uaa.alaska.edu/students/veterans>)

UAA is approved to provide training to veterans, service members and eligible dependents of veterans. Students who plan to use the Department of Veterans Affairs (DVA) educational benefits must notify the UAA Military & Veteran Student Services team by submitting an online request for certification (<https://www.uaa.alaska.edu/students/veterans/va-forms.cshhtml>). Students using DVA educational benefits must apply for admission to a degree or certificate program at UAA. In accordance with federal regulations, UAA must report this information to the DVA, along with information regarding students' enrollment, grades, academic progress, and eligible tuition and fee rates if the student is using the Post 9-11 G.I. Bill®. Only coursework that is applicable to the student's current degree or certificate program is eligible for funding under DVA programs.

DVA students with previous college or university experience must have official transcripts on file with the university. Each student must request these transcripts from each previous institution when applying for admission to UAA. DVA may withhold benefits until this requirement is satisfied.

Student Freedoms, Rights and Responsibilities

UAA encourages people of all ages to develop their skills and talents according to their individual abilities and interests so that, collectively, they contribute to the continuum of democracy. University policies, procedures and regulations are formulated to guarantee each student's freedom to learn and to protect the rights of others.

The concept of rights and freedoms, no matter how basic or widely accepted, carries with it corresponding responsibilities. Students, as well as other members of the university community, enjoy the same constitutional and civil rights guaranteed all citizens. At the same time, they are subject to the laws of the nation, the state of Alaska and the local community. All members of the university community have a responsibility to protect and maintain an academic climate in which the freedom to learn can be enjoyed by all. To this end, certain basic regulations and policies have been developed to govern the behavior of students as members of the university community.

Students are responsible for knowing UAA policies, procedures, and deadlines which pertain to them. A summary of academic policies, regulations, and deadlines pertaining to students is located in the UAA Catalog (p. 25). A broader summary of policies and regulations pertaining to students is in the UAA Student Handbook (<http://catalog.uaa.alaska.edu/handbook>), which also contains descriptions of students' freedoms, rights and responsibilities. Students may also obtain a copy of University of Alaska Board of Regents' Policies and University Regulations (<http://www.alaska.edu/bor/policy-regulations>).

Student Code of Conduct and Student Conduct Review Procedures

Student Code of Conduct

<https://catalog.uaa.alaska.edu/handbook/student-freedoms-rights-and-responsibilities/student-code-of-conduct/>

As with all members of the university community, the University requires students to conduct themselves honestly and responsibly and to respect the rights of others. Students may not engage in behavior that disrupts the learning environment, violates the rights of others or otherwise violates the Student Code of Conduct (Code), university rules, regulations, or procedures. Students and student organizations will be responsible for ensuring that they and their guests comply with the Code while on property owned or controlled by the University or at activities authorized or sponsored by the University. The Student Code of Conduct may be found online in the UAA Student Handbook

(<https://catalog.uaa.alaska.edu/handbook/student-freedoms-rights-and-responsibilities/student-code-of-conduct>).

Student Conduct Review Procedures

<https://catalog.uaa.alaska.edu/handbook/complaint-procedures-uaa/student-misconduct-and-academic-dishonesty/student-conduct-review-procedures/>

A student conduct procedure is a review undertaken by the University to establish whether there is substantial information to determine if it is more likely than not that a student violated the Code. A complete copy of the Student Conduct Review Procedures can be found in the UAA Student Handbook (<https://catalog.uaa.alaska.edu/handbook/complaint-procedures-uaa/student-misconduct-and-academic-dishonesty/student-conduct-review-procedures>).

Student Dispute/Complaint Resolution Process

University students have a variety of procedures available to them to process complaints or disputes about actions or inaction by members of the university community that adversely affects them. The process used will depend on the nature of the complaint. Academic Dispute Resolution Procedures can be found under Academic Rights of Students (p. 25). Non-academic procedures can be found in the UAA Student Handbook (<http://catalog.uaa.alaska.edu/handbook>).

Student Complaint Process / External Agencies

Students have the right to address complaints to relevant external agencies. Most external complaint processes require that the student exhaust avenues of complaint internal to the institution before the external agency will consider a grievance.

The following contact information is for UAA's state regulatory agency and its regional accreditor.

State regulatory agency:

Alaska Commission on Postsecondary Education (http://acpe.alaska.gov/ABOUT_US/Consumer_Protection) (ACPE)
PO Box 110505
Juneau, AK 99811-0505

Accrediting body:

Northwest Commission on Colleges and Universities (<http://www.nwccu.org>) (NWCCU)
8060 165th Ave. NE, Suite 100
Redmond, WA 98052

If you are residing outside of Alaska while attending UAA, you may be able to file a concern in the state in which you are residing. The State Higher Education Executive Officers (SHEEO) have compiled a PDF of state complaint contacts (<http://www.sheeo.org/sites/default/files/Complaint%20Process%20Links%2012-2012.pdf>) for reference.

Tuition and Fees

2018-2019 Tuition Summary

Undergraduate: Preparatory and Lower Division

(Course numbers A050–A299)

Resident (UAA, Mat-Su, KPC)	\$212 per credit hour
Resident (PWSC, Kodiak)	\$204 per credit hour
Nonresident* (UAA, Mat-Su, KPC)	\$751 per credit hour
Nonresident* (PWSC, Kodiak)	\$743 per credit hour

Undergraduate: Upper Division

(Course numbers A300–A499)

Resident (all campuses)	\$256 per credit hour
Nonresident* (all campuses)	\$795 per credit hour

Professional Development

(Course numbers A500–A599)

Tuition costs vary; contact the department or refer to specific course listing on UAOnline. Nonresident fees do not apply.

Graduate

(Course numbers A600–A699)

Resident	\$489 per credit hour
Nonresident*	\$1,028 per credit hour

* Nonresident students are assessed nonresident fees on all academic credits including self-support, except A500-A599 level credits. Nonresident students who restrict their enrollment to no more than 4 credits each semester are charged resident tuition.

Resident Tuition Assessment

Board of Regents Policy P05.10.025

1. For the purpose of tuition assessment under this chapter, a resident is a person who, at the end of the add/drop period for regular semester-length courses, is a United States citizen or eligible non-citizen that has been physically present in Alaska for two years and who declares the intention to remain in Alaska indefinitely. "Eligible non-citizen" shall have the same meaning as that term is used in determining eligibility for federal student financial aid. Physical presence will be determined by criteria established in university regulation. Alternatively, a person who received or has been qualified by the State of Alaska Permanent Fund Dividend Division to receive an Alaska Permanent Fund dividend within the last 12 months, certifies they have been in Alaska for the past 12 months, and declares their intent to remain in Alaska indefinitely or meets other resident tuition eligibility requirements specified in Regents' Policy will be eligible for resident tuition assessment. The

university chief enrollment officer or designee will apply these rules to the facts in individual cases.

2. Notwithstanding the provisions of subsection 1 above, a student will be ineligible for resident tuition purposes unless exempted by Regents' Policy 05.10.050 if:
 - a. during the two years of claimed residency, the student was absent from Alaska for an aggregate of more than 120 days other than documented absences due to illness, or attendance at another educational institution while maintaining Alaska residency;
 - b. during the prior two years, the student did any act inconsistent with Alaska residency such as claiming residency in another state or voting as a resident of another state, or currently retaining a driver's license in another state;
 - c. during the past two years, the student has registered as a resident in an educational institution in another state. If an institution does not distinguish between a resident and a non-resident, additional documentation will be required; or
 - d. during the past two years, the student has paid tuition at the University of Alaska at the Western Undergraduate Exchange (WUE) program rate.

Nonresident Tuition Surcharge

Board of Regents Policy P05.10.050

Any person who does not qualify as an Alaska resident under regents' policy 05.10.025, or has not otherwise been exempted under this chapter will be assessed a nonresident tuition surcharge in addition to regular tuition. However, the following persons are exempted from nonresident tuition surcharges and treated as a resident for the purpose of tuition assessment if they are a U.S. citizen or an "eligible non-citizen":

1. Active duty United States military and their spouse and dependent children;
2. United States veterans eligible for a Veterans Administration education benefit, and their spouse and dependent children;
3. Members of the National Guard and Reservists, their spouses and dependent children, regardless of whether they yet qualify as residents of the state under any other requirements;
4. Dependent children of a person who graduated and holds an associate, baccalaureate, master's or doctoral degree from the University of Alaska;
5. Dependent children of an Alaska resident as evidenced by the most current federal income tax return filed within the past 16 months;
6. Students participating in the Western Interstate Commission on Higher Education (WICHE) Western Regional Graduate Program (WRGP);
7. Students enrolled for 4 or fewer credit hours within the UA system during a semester;
8. Students from other states or provinces whose public universities waive nonresident tuition surcharges for Alaska residents, as may be approved by the university president; a list of participating states or universities shall be published in university regulation;

9. Students from foreign cities and provinces that establish sister city or sister province relationships with the state of Alaska, or Alaska municipalities, and that have been approved by the president; a list of participating and approved communities shall be published in university regulation;
10. Students designated by the UA Scholars Program as UA Scholars;
11. Participants of the University of Alaska College Savings Plan who meet eligibility criteria as may be established by the Education Trust of Alaska;
12. Spouse or dependent children of a University of Alaska employee; or
13. Students who graduated within the past 12 months from a qualified Alaska high school. "Qualified Alaska high school" shall have the same meaning used to determine eligibility for the UA Scholars Program.

Tuition Surcharge

University Regulation R05.10.040 B provides that the president may establish special tuition or tuition surcharges in lieu of, or in addition to, regular tuition in order to provide special for-credit courses and programs or to meet special needs. In April 2016 a 20% surcharge was approved for the following programs:

UAA College of Business and Public Policy: 20% surcharge be applied to the base tuition for upper division undergraduate and graduate courses

UAA College of Engineering: 20% surcharge be applied to the base tuition for all undergraduate and graduate engineering and computer science courses

Western Undergraduate Exchange (WUE)

UAA participates in the WUE program of the Western Interstate Commission for Higher Education (WICHE). Through WUE, certain students who are not Alaska residents may enroll in designated UAA programs. They pay resident tuition plus 50 percent of that amount (as well as other fees that are paid by all students). WUE students do not pay nonresident tuition.

Because UAA participates in WUE, residents of Alaska may enroll under the same terms in designated institutions and programs in other states.

Information about WUE programs at UAA may be obtained from Enrollment Services (<https://www.uaa.alaska.edu/onestop>). Alaska residents may obtain information about WUE programs in other states from either of the following addresses:

Certifying Officer for Alaska Commission on Postsecondary Education
3030 Vintage Blvd.
Juneau, AK 99801
1-800-441-2962

WICHE Student Exchange Program
3035 Center Green Drive, Suite 200
Boulder, CO 80301-2204

(303) 497-0210

wiche.edu/wue (<http://wiche.edu/wue>)

Senior Citizen Tuition Waiver

UAA welcomes senior citizens to its classrooms and waives tuition for those eligible under Board of Regents policy R05.10.080.B. Regular tuition shall be waived for Alaska residents who meet the following criteria: they must be age eligible to receive full (unreduced) social security retirement benefits and they must register on a space available basis. "Space available basis" means when courses can accommodate such students in addition to other enrolled students.

Follow three easy steps to complete registration:

1. If you have not taken classes in the last two years, complete a Non-Degree Application for Admission (<https://www.uaa.alaska.edu/records/registration/registration-process.cfm#nondegree>) at UAOnline
2. Find (<https://www.uaa.alaska.edu/records/registration/registration-process.cfm#class>) the class or classes you want to take and write down class information, including the CRN number. Do not register before the first day of the semester
3. Submit Senior Tuition Waiver (<https://www.docusign.net/member/PowerFormSigning.aspx?PowerFormId=76ba4f23-1303-4db9-8e94-1c6645c37063>) to the Cashiering Office at the University Center

Please note these important facts about the Senior Citizen Tuition Waiver (SCTW):

- SCTW waives tuition only.
- SCTW is only accepted for classes registered for on or after the first day of the semester and on a space-available basis.
- SCTW does not apply if the student has registered prior to the first day of semester.
- Seniors are responsible for any student or course fees associated with the course(s).
- Payment must be submitted by the payment deadline to avoid late fee(s).
- SCTW forms are only accepted until the last day of class for the term in question; submissions past the term end date will be denied.
- Waivers may be returned in person to the Cashier's office by email (uaa_cashiering@alaska.edu) or fax. Docusign (electronic signature) is now accepted: Senior Tuition Waiver (<https://www.docusign.net/member/PowerFormSigning.aspx?PowerFormId=76ba4f23-1303-4db9-8e94-1c6645c37063>).
- For more information, including eligibility and restrictions, see Regents Policy 05.10.080.B (<http://www.alaska.edu/bor/policy/05-10.pdf>).

Fees

In addition to tuition, any course may use materials, supplies or services that necessitate an additional fee. Non-course fees fund student-centered services and programs that support students' academic and social integration into the UAA community, engage students in active

learning, and foster the growth and development of each student. Fees may also be charged for administrative and/or instructional services. All resident and non-resident tuition rates and student activity fees are approved by the Board of Regents of the University of Alaska. The university reserves the right to change tuition rates or fees at any time. Fees will vary at community campuses.

Administrative Fee

An administrative fee is a fee charged instead of tuition. There may be other fees assessed for the course such as lab or material fees in addition to the administrative fee.

Audit Fee

Auditors pay the same tuition and fees as students registering for credit.

Continuing Education Unit (CEU) Fee

This fee varies. It is charged per continuing education unit instead of tuition.

Continuous Registration Fee

Continuous registration is expected of graduate students. (See Graduate Programs (p. 345) for more information.)

Course Fees

Course fees are specific to particular courses and meet expenses beyond those normally covered by tuition. UAOnline (<http://uaonline.alaska.edu>) identifies courses for which fees are charged and their purpose: lab fee, materials fee, learner services fee or special fee. Fee amounts vary.

Credit-by-Examination Fee

A nonrefundable \$40-per-credit fee is charged to challenge a course.

eLearning Fee

A per-credit charge for each Anchorage campus distance course to support distance education.

ePortfolio Fee

The ePortfolio fee supports software licensing, user training and student support programs.

Facility Fee

The facility fee supports the capital reinvestment for university facilities and academic equipment. Capital reinvestment funds construction that modernizes university classrooms, laboratories, residence halls and other buildings so that students have access to learning and living facilities that enhance the academic experience.

Language Credit-by-Placement Fee

An accepted, degree-seeking UAA student who has completed in residence a Department of Languages UAA catalog course with a grade of B or better is eligible to receive credit for the two immediately preceding language courses.

Late Payment Fees

A \$125 fee will be assessed on all accounts that are not paid by the payment deadline. An additional \$175 fee will be assessed on all accounts that are not paid prior to the published second late fee assessment date. Students who pay for or drop their courses prior to the published deadline will not be required to pay these fees.

Network Charge

The network charge covers rapidly rising costs of the university-wide infrastructure. The network charge helps offset part of the cost for maintaining and enhancing the system network that connects all UA campuses to each other and to the Lower 48 and allows for Internet and research network access. Half of the fee goes to the UA statewide system for the operation of common networks and half remains at UAA to address local campus network and student access needs. The network charge will be applied on a course-by-course basis to tuition, nonresident surcharges if applicable, and fees in lieu of tuition for credit and noncredit courses. Courses with applicable fees in lieu of tuition less than the lower division credit hour tuition rate will be exempt from the charge. All calculated fees will be rounded to the nearest dollar. The minimum network charge per course will be \$3.

Noncredit Course Fee

Noncredit courses are numbered A001–A049. These courses do not meet degree requirements and may have fees other than regular tuition. Such fees are listed in the class listing as special fees.

Parking Permits

All areas on campus except those designated as visitor parking require an appropriately displayed parking permit. Permits may be purchased online at www.thepermitstore.com (<http://www.thepermitstore.com>) or from the UAA Parking Office any time throughout the semester. The UAA Parking Office is located in the basement of the UAA Bookstore on the main campus. Permit fees are nonrefundable. For further details, call the Parking Office at (907) 786-1119 or visit www.uaa.alaska.edu/parking (<http://www.uaa.alaska.edu/parking>).

Placement Test Fee

This fee is for testing for course placement.

Self-Support Fee

Fee for a course that is funded entirely through the revenues collected when students sign up for that specific course. Costs vary by course and may include salaries, supplies, advertising, facilities and travel. Separate refund policies apply.

Student Life Fees

All students enrolled in 6 or more credits and having at least one course (3 credits or more) on the Anchorage campus* are assessed a per-credit mandatory student life fee per semester for access to student-related programs and facilities: athletics, sports complex, student activities, and student health and counseling services.

Students enrolled in at least 1 academic credit but not meeting the enrollment requirements above, whether enrolled on or off campus, may elect to pay certain student fees for access to these services.

Student life fees for students registered in fewer than 6 credits are set at a fixed rate. Contact the Issue Cage in the Wells Fargo Sports Complex (<https://www.uaa.alaska.edu/about/administrative-services/departments/athletics/recreation/staff-contact-information/index.cshhtml>) for information about an athletics/sports complex fee, and contact Student Activities (<http://www.uaa.alaska.edu/sll/activities>) in the Student Union building regarding a student activity fee. Summer student life fees are published in the online registration guide (<https://www.uaa.alaska.edu/students/registrar/registration/index.cshhtml>) on the Office of the Registrar's website.

Student Organization Fees

All students, with the exception of senior citizens, enrolled in 3 or more credits on the Anchorage campus* are assessed mandatory student organization fees per semester: a USUAA fee for student government, a green fee to support sustainability practices, a concert program fee, and a student media fee for The Northern Light student newspaper and KRUA 88.1 FM student radio station. The use of these fees is governed by the Union of Students at UAA (USUAA) Constitution.

Students enrolled in at least 1 academic credit but not meeting the enrollment requirements above, whether enrolled on or off campus, may elect to pay these fees per semester in order to have access to student organization programs and services.

Summer session students are not assessed the concert program fee or the green fee.

Student Transportation Fee

Students registered in 3 or more credits are assessed the student transportation fee to support campus shuttle service, U-Pass People Mover program (citywide bus pass), bicycle racks, trail/sidewalk maintenance and Call Team walking escorts.

Technology Fee

A fee to provide up-to-date technology equipment, software, maintenance, training and support for student use.

Transcript Fee

A per-copy fee is charged for routine or rush processing and must be paid in advance.

* *The Aviation Complex, King Career Center and University Center are considered on-campus facilities for purposes of fee assessment.*

Financial Obligations and Payment

The University of Alaska Anchorage reserves the right to withhold final grades, transcripts or diplomas from students who have not fulfilled all their financial obligations to the institution. Permission to register will be denied for adding or auditing courses, or a student's current registration may be canceled. Students are held financially responsible for all courses for which they register. Interest, late fees or collection costs will be added to a student's account. Past due accounts will be sent to a collection agency and reported to the credit bureau. The university is authorized to garnish Alaska Permanent Fund dividends for payment of past due accounts under Alaska Statutes 14.40.251

and 43.23.073. For questions about past due accounts, contact Collections in Accounts Receivable at uaa_collections@alaska.edu (uaa_collections@alaska.edu).

Unless a preferred email is designated, UAA will use the UAA-assigned e-mail address to communicate with students on many important matters, including financial matters. Please refer to Student Freedoms, Rights & Responsibilities (p. 60) for details. Students may add or update their preferred email address in UAOnline (<http://uaonline.alaska.edu>).

Payment Procedure

All tuition, fees and other charges for the semester must be paid at the time of registration or by the payment deadline. Please refer to (<https://www.uaa.alaska.edu/students/registrar/calendar/index.cshhtml>) Dates and Deadlines (<https://www.uaa.alaska.edu/students/registrar/calendar/index.cshhtml>) (<https://www.uaa.alaska.edu/students/registrar/calendar/index.cshhtml>) for more details. Late-starting classes and miscellaneous charges after the payment deadline should be paid when the charge is incurred and are subject to any subsequent late fee assessments during the term.

Important facts about your student account:

- A paper bill will not be mailed.
- An electronic bill will be generated on or about the 15th of each month and an email reminder will be sent to your UAA-assigned e-mail address. Additionally, the bill is available via UAOnline.
- UAA does not initiate drop for non-payment.
- Tuition and fee charges may be audited, corrected, and adjusted at any time. Students are notified of adjustments by e-mail. The university reserves the right to change its tuition or fees at any time

4 ways to pay your bill:

- Online through the TMS Student Account Center (<https://uaaalaska.afford.com>) (where a credit/debit card includes a non-refundable variable rate service fee based upon the type of card presented - as low as 1% for eligible cards or \$1, whichever is greater) or at UAOnline (where payment by credit/debit card includes a non-refundable service fee of 2.85% of the transaction amount or \$3, whichever is greater). Web check (ACH) payments can be made on UAOnline or on the TMS Student Account Center and will not be assessed the service fee and will remain **free**.
- Pay in person with check, money order, or cash at UAA Cashiering in the University Center.
- Send a check or money order to UAA Cashiering, PO Box 141609, Anchorage, AK 99514-1609. Please be sure to include the student ID number of the account you would like credited.
- International payments may be made using Flywire (<https://www.flywire.com>).

Payment Plans:

Students requiring a payment plan may enroll with Tuition Management Services via the TMS Student Account Center (<https://>

uaaalaska.afford.com) (online at: <https://uaaalaska.afford.com>), or by calling 1-800-307-6574.

See payment plan information (<http://www.uaa.alaska.edu/accounting-services/payment-plan.cfm>) on the Accounting Services website for the available payment plan options.

Refund Policy

Refund processing is automatic for students who officially drop courses or withdraw from the university by the refund deadlines. Students are responsible for thoroughly reading the class listing and being aware of the published refund deadlines for their particular classes. The date of official drop or withdrawal activity determines eligibility for a refund.

Students who drop or withdraw, or who are administratively dropped or withdrawn from courses as a result of university disciplinary action, forfeit all rights to any refund.

Tuition and fee charges may be audited, corrected and adjusted before the end of the current semester. Students are notified of adjustments by mail. No refunds are issued for \$5 or less. The university reserves the right to change its tuition or fees at any time.

If tuition and fees are paid at any time in a semester by credit card, the credit card will be refunded (up to the amount paid) if a credit is later created on the account. This includes, but is not limited to, credits created by scholarships, federal aid, personal checks and tuition waivers. If tuition was paid by cash or check, a refund check will be mailed to the student's mailing address. A charge of \$18.50 is assessed for all checks reissued due to a stop-payment request by the student. For questions regarding refunds, contact Disbursements at uaa_acctsv@alaska.edu

Regular Tuition, Credit Courses (full semester)

- One hundred percent of both the tuition and course fees are automatically refunded when official drop activity is completed by the second Friday of the semester.
- No refund is issued for a drop/withdrawal after the second Friday of the semester.
- For classes with irregular start or end dates, the 100 percent refund period ends five business days after the start of the class. Please refer to the summer class listing for the summer term refund policy.

Canceled Classes

If UAA cancels a class, a 100 percent refund of tuition and course fees is automatically processed. Refund processing dates are listed in the class listing.

Withdrawal from Classes

No tuition fee refund or exchange will be allowed for withdrawal after the drop deadline.

Noncredit, CEU and Self-Support Classes

One hundred percent of all tuition charged is refunded if the student officially drops at least two business days before the first class begins. There is no refund after this time.

Petition for Refund

In the event of extenuating circumstances, a student or person with legal authority to act on behalf of a student, may petition for an exception to University policy on refunds of tuition and fees. Petitions are not automatically granted but will be considered in light of the criteria set forth below and the individual circumstances of the request. Being unaware of university procedures or deadlines does not constitute justification for refund. Refunds are rarely granted and only when extenuating circumstances are documented.

1. Only requests submitted by the student or by a person with legal authority to act on behalf of the student will be considered.
2. The deadline to submit a Petition for Refund is no later than one academic year following the semester in which the course was offered. Requests that are not received within this time frame will not be considered.
3. At the time a Petition for Refund is filed, the student must already have already withdrawn or received a failing or No Basis. Refunds will not be considered for courses in which a student is still registered or for which a passing grade, Incomplete, Deferred or Audit grade exists.
4. Decisions will be made solely on supporting documentation provided. In all cases a personal statement from the student is required summarizing the situation and explaining the need for an exception to the refund deadline.
5. A request will only be approved if the petitioner can demonstrate unanticipated and unavoidable circumstances beyond the student's control that arose or came to light after published deadlines. Work-related issues, financial hardship and failure to read UAA's documents generally do not present justifiable reasons to support a refund request.
6. Petitions for refund for self-support courses are generally not allowed and must have approval of the academic unit/department chair or director.
7. Mandatory Student Fees are not refundable unless a student drops all courses during the 100% refund period.
8. If the petition for refund is approved, refunds will be issued to the original funding source, e.g., credit card, financial aid, granting agency, lending agency, etc.
9. Petitions will be reviewed periodically and the number of petitions being reviewed will determine the time for response. All charges and late fees are considered true and correct and are therefore not suspended during the review process. The university reserves the right to move forward on all collection efforts during the review process.
10. Requests for reconsideration of an adverse decision must be in writing, provide additional documentation not presented in the original request and be received within 10 working days of the day the decision is mailed or otherwise distributed to the student.
11. Requests for adding courses after the add/drop deadline or requests to retroactively withdraw from courses must be applied for separately through Request for Late Add or Retroactive Withdrawal (https://www.uaa.alaska.edu/students/registrar/_documents/Late%20Add-Retroactive%20Withdrawal.pdf) process.

12. Complaints about dissatisfaction with academic courses, methods of course delivery or instructor performance are not considered under this process. Depending on the nature of the complaint, these matters are considered according to the Student Dispute/ Complaint Resolution Process or the Academic Dispute Resolution Procedure, which can be found in the UAA Student Handbook (<http://catalog.uaa.alaska.edu/handbook>).

Military Students Called to Active Duty or Deployment

Students called to active duty or involuntarily activated, deployed or relocated during an academic term are eligible for 100 percent refund of tuition and fees, and a prorated adjustment on housing and meal plans. See Course Performance (p. 35) for more information.

Annual Notifications and Disclosures

The University of Alaska does not discriminate on the basis of race, religion, color, national origin, citizenship, age, sex, physical or mental disability, status as a protected veteran, marital status, changes in marital status, pregnancy, childbirth or related medical conditions, parenthood, sexual orientation, gender identity, political affiliation or belief, genetic information, or other legally protected status.

When implementing this commitment, the University is guided by Title VI and VII of the Civil Rights Act of 1964 and Civil Rights Act of 1991; Title IX of the Education Amendments of 1972; Executive Order 11246, and Executive Order 11375, as amended; Equal Pay Act of 1963; Age Discrimination in Employment Act of 1967 and Age Discrimination Act of 1975; Vietnam Era Veterans Readjustment Assistance Act of 1974; Americans with Disabilities Act (ADA) of 1990; the Americans with Disabilities Act Amendments Act of 2008; Genetic Information Nondiscrimination Act of 2008; Pregnancy Discrimination Act; Immigration Reform & Control Act; Vocational Rehabilitation Act of 1973 and other federal laws or Alaska Statutes which guarantee equal opportunity to individuals and protected classes within our society.

The University's commitment to non-discrimination, including against sex discrimination, applies to students, employees, and applicants for admission and employment.

This policy therefore affects employment policies and actions, as well as the delivery of educational services at all levels and facilities of the University. Further, the University's objective of ensuring equal opportunity will be met by taking affirmative action: i.e., making intensified, goal-oriented efforts to substantially increase the participation of groups where their representation is less than proportionate to their availability; providing reasonable accommodations to employees and students with disabilities; and ensuring that employment opportunities are widely disseminated to agencies and organizations that serve underrepresented protected classes.

The following person has been designated to handle inquiries regarding the non-discrimination policies:

University of Alaska Anchorage

Director, Office of Equity and Compliance

3890 University Lake Drive, Suite 108

Anchorage, AK 99508

Phone: 907-786-0818

E-mail: [u\(uaa_oec@alaska.edu\)aa_titleix@alaska.edu](mailto:u(uaa_oec@alaska.edu)aa_titleix@alaska.edu)

(uaa_titleix@alaska.edu)

Website: www.uaa.alaska.edu/about/equity-and-compliance/ (<https://www.uaa.alaska.edu/about/equity-and-compliance/>)

University of Alaska Fairbanks

Director of Diversity and Equal Opportunity

739 Columbia Circle

PO Box 756910

Fairbanks, AK 99775-6910

Phone: 907-474-7300

E-mail: uaf-deo@alaska.edu

Website: www.uaf.edu/oeo/ (<http://www.uaf.edu/oeo/>)

University of Alaska Southeast

Director of Human Resources

11066 Auke Lake Way

Juneau, Alaska 99801

Phone: 907-796-6473

E-mail: gcheney@alaska.edu

Website: www.uas.alaska.edu/hr (<http://uas.alaska.edu/hr>)

For sex discrimination claims or other inquiries concerning the application of Title IX of the Education Amendments of 1972 and its implementing regulations, individuals may contact the University's Title IX Coordinator or the Assistant Secretary in the U.S. Department of Education Office of Civil Rights:

UAA Title IX Coordinator

3890 University Lake Drive, Suite 108, Anchorage, AK 99508

Phone: 907-786-6086

E-Mail: [uaa_titleix@ \(uaa_titleix@uaa.alaska.edu\)alaska.edu](mailto:uaa_titleix@(uaa_titleix@uaa.alaska.edu)alaska.edu)

(uaa_titleix@alaska.edu)

Website: www.uaa.alaska.edu/about/equity-and-compliance/ (<https://www.uaa.alaska.edu/about/equity-and-compliance/>)

UAF Title IX Coordinator

739 Columbia Cr., Fairbanks, AK 99775

Phone: 907-474-7300

E-Mail: uaf-tix@alaska.edu

Website: www.uaf.edu/titleix/ (<http://www.uaf.edu/titleix/>)

UAS Title IX Coordinator

11066 Auke Lake Way, Juneau, AK 99801

Phone: 907-796-6036

E-Mail: uas_jytitle9@alaska.edu

Website: www.uas.alaska.edu/policies/titleix.html (<http://www.uas.alaska.edu/policies/titleix.html>)

Office for Civil Rights, Seattle Office

U.S. Department of Education

915 Second Ave., Room 3310

Seattle, WA 98174-1099

Phone: 206-607-1600

TDD: 800-877-8339

E-mail: OCR.Seattle@ed.gov

Website: www2.ed.gov/about/offices/list/ocr/docs/howto.html (<http://www2.ed.gov/about/offices/list/ocr/docs/howto.html>)

For employment or educational discrimination, students, parents, employees and applicants for employment may file a complaint with the U.S. Department of Education within 180 calendar days of the alleged discriminatory act.

Equal Employment Opportunity Commission

Federal Office Building

909 First Avenue

Suite 400
 Seattle, WA 98104-1061
 Phone: 800-669-4000
 Fax: 206-220-6911
 TTY: 800-669-6820
 Website: www.eeoc.gov/employees/charge.cfm (<http://www.eeoc.gov/employees/charge.cfm>)

For educational discrimination, individuals may file a complaint with the U. S. Department of Justice

U.S. Department of Justice Civil Rights Division

950 Pennsylvania Avenue, N.W.
 Educational Opportunities Section, PHB
 Washington, D.C. 20530
 Phone: 202-514-4092 or 1-877-292-3804 (toll-free)
 Fax: 202-514-8337
 E-mail: education@usdoj.gov
 Website: www.justice.gov/crt/how-file-complaint#three (<http://www.justice.gov/crt/how-file-complaint#three>)

For employment or educational discrimination, individuals may file a complaint with the State of Alaska:

Alaska State Human Rights Commission

800 A Street, Suite 204
 Anchorage, AK 99501-3669
 Anchorage Area: 907-274-4692
 Anchorage Area TTY/TDD: 907-276-3177
 Toll-Free Complaint Hot Line (in-state only): 800-478-4692
 TTY/TDD Toll-Free Complaint Hot Line (in-state only): 800-478-3177
 Website: www.humanrights.alaska.gov (<http://www.humanrights.alaska.gov>)

For discrimination related to a Department of Labor funded grant, individuals may file a complaint with the U. S. Department of Labor within 180 calendar days of the alleged discriminatory act.

U.S. Department of Labor

ATTENTION: Office of External Enforcement
 Director, Civil Rights Center
 200 Constitution Avenue, NW
 Room N-4123
 Washington, DC 20210
 Fax: 202-693-6505, ATTENTION: Office of External Enforcement (limit of 15 pages)
 E-mail: CRCEXternalComplaints@dol.gov
 Website: www.dol.gov/oasam/programs/crc/index.htm (<http://www.dol.gov/oasam/programs/crc>)

For discrimination related to a National Science Foundation funded grant, individuals may file a complaint with the National Science Foundation within 180 calendar days of the alleged discriminatory act.

National Science Foundation

Complaints Adjudication & Compliance Manager
 Office of Diversity & Inclusion (ODI)
 4201 Wilson Blvd., Rm. 255
 Arlington, VA 22230

Phone: 703-292-8020
 E-mail: tsisley@nsf.gov
 Website: www.nsf.gov/od/odi/ (<http://www.nsf.gov/od/odi/>)

Biographic/Demographic Information

UAA must comply with state and federal reporting requirements and therefore requires that students provide specific biographic or demographic information on registration or admission forms. The university uses the information for statistical purposes and as an identifier for university records. This information is relevant to the university's admission and enrollment policies. The university is careful to guard private information and does not discriminate on the basis of this information.

Social Security Number

The University of Alaska has established student identification numbers and does not use Social Security numbers for student identification. The university is still required to collect a valid Social Security number from each student for IRS, employment and federal financial aid purposes. The last four digits of the Social Security number are included on official transcripts for identification matching purposes.

Campus Diversity and Compliance

Through the institution's Affirmative Action Plan, UAA recognizes its responsibility to provide education and employment opportunities for all qualified individuals. UAA also operates an Office of Equity and Compliance that monitors civil rights, federal and state laws, orders and decisions to ensure that access, inclusion and equity are practiced at UAA. Students and prospective students are afforded educational services, such as admission decisions, financial aid, access to academic programs and health and counseling services, without regard to race, color, religion, national origin, age, sex, sexual orientation, gender identity, veteran status, physical or mental disability, marital status, genetic information, pregnancy, or parenthood, except as necessary and permitted by law.

Annual Security and Fire Safety Report

www.uaa.alaska.edu/safety

The Annual Security and Fire Safety Report is required by federal law and contains policy statements and crime statistics for UAA. The policy statements address UAA's policies, procedures and programs concerning safety and security — for example, policies for responding to emergency situations and sexual offenses. Three years' worth of statistics are included for certain types of crimes that were reported to have occurred on campus, in or on off-campus buildings or property owned or controlled by UAA, and on public property within or immediately adjacent to the campuses. In addition, the report includes fire safety information and statistics pertaining to UAA's residential communities. Access the report online (<https://www.uaa.alaska.edu/safety>) or request a paper copy from the UAA Dean of Students Office in Room 122 of Rasmuson Hall on the Anchorage campus.

Computer Use and Software Copyright Policy

All faculty, staff, and students who use any computer at the university are responsible for using computer resources in an ethical and legal manner. For detailed information see the Acceptable Use

Policy on the IT Services website (<http://www.uaa.alaska.edu/informationtechnologyservices>).

Copyright and Intellectual Property

www.alaska.edu/alaska/about-ua/copyright/ (<http://www.alaska.edu/alaska/about-ua/copyright/>)

Summary of Civil and Criminal Penalties for Violation of Federal Copyright Laws

Copyright infringement is the act of exercising, without permission or legal authority, one or more of the exclusive rights granted to the copyright owner under section 106 of the Copyright Act (Title 17 of the United States Code). These rights include the right to reproduce or distribute a copyrighted work. In the file-sharing context, including peer-to-peer file sharing, downloading or uploading substantial parts of a copyrighted work without authority constitutes an infringement.

Penalties for copyright infringement include civil and criminal penalties. In general, anyone found liable for civil copyright infringement may be ordered to pay either actual damages or “statutory” damages affixed at not less than \$750 and not more than \$30,000 per work infringed. For “willful” infringement, a court may award up to \$150,000 per work infringed. A court can, in its discretion, also assess costs and attorneys’ fees. For details, see Title 17, United States Code, Sections 504, 505.

Willful copyright infringement can also result in criminal penalties, including imprisonment of up to five years and fines of up to \$250,000 per offense. For more information, please see the website of the U.S. Copyright Office (<http://www.copyright.gov>).

Drug-Free Schools Notification

www.uaa.alaska.edu/students/drug-free-schools-notification.cshtml (<https://www.uaa.alaska.edu/students/drug-free-schools-notification.cshtml>)

The Drug-Free Schools Notification contains UAA’s alcohol and other drug policies and behavioral expectations for students and employees, disciplinary actions for violations of these policies, and resources available for assistance with alcohol and other drug issues. This notification contains physiological effects, risks and criminal penalties associated with alcohol and other drug use. Access the report online (<https://www.uaa.alaska.edu/students/drug-free-schools-notification.cshtml>) or request a paper copy from the UAA Dean of Students Office in Room 122 of Rasmuson Hall on the Anchorage campus.

Family Educational Rights and Privacy Act (FERPA)

The Family Educational Rights and Privacy Act (FERPA) affords eligible students certain rights with respect to their education records. An “eligible student” under FERPA is a student who is 18 years of age or older or who attends a postsecondary institution. These rights include:

1. The right to inspect and review the student’s education records within 45 days after the day the university receives a request for access. A student should submit to the Office of the Registrar a

written request (letter or fax) that identifies the record(s) the student wishes to inspect. The registrar will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the registrar, registrar-designated staff shall advise the student of the correct official to whom the request should be addressed.

2. The right to request the amendment of the student’s education records that the student believes is inaccurate, misleading or otherwise in violation of the student’s privacy rights under FERPA.

A student who wishes to ask the university to amend a record should write the university official responsible for the record, clearly identify the part of the record the student wants changed, and specify why it should be changed.

If the university decides not to amend the record as requested, the university will notify the student in writing of the decision and the student’s right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. The right to provide written consent before the university discloses personally identifiable information from the student’s education records, except to the extent that FERPA authorizes disclosure without consent.

The university discloses education records without a student’s prior written consent under the FERPA exception for disclosure to school officials with legitimate educational interests. A school official is a person employed by the university in an administrative, supervisory, academic, research or support staff position (including law enforcement unit personnel and health staff); a person serving on the Board of Regents; or a student serving on an official committee, such as a disciplinary or grievance committee. A school official also may include a volunteer or contractor outside of the university who performs an institutional service or function for which the university would otherwise use its own employees and who is under the direct control of the university with respect to the use and maintenance of personally identifiable information from education records, such as an attorney, auditor, or collection agent or a student volunteering to assist another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for the university.

Upon request, the university also discloses education records without consent to officials of another school in which a student seeks or intends to enroll.

The university also discloses information without a student’s prior written consent under the FERPA exception for disclosure of information that it has designated as “directory information.”

See the list below of the other disclosures that the university may make without consent.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by the university to comply with the

requirements of FERPA. The name and address of the office that administers FERPA is:

*Family Policy Compliance Office
U.S. Department of Education
400 Maryland Ave., SW
Washington, DC 20202*

The following information is designated as directory information by the university:

1. Names of students
2. Dates of attendance at the university
3. Program/major field(s) of study
4. Degrees and certificates received, including dates
5. Participation in officially recognized university activities
6. Academic and co-curricular awards, honors and scholarships received and dates received
7. Weight and height of students on athletic teams
8. Students' electronic mail addresses
9. Hometown city and state
10. Enrollment status

A student may inform the Office of the Registrar in writing that he/she does not give permission for the university to release his/her directory information or may submit the request through UAOnline (<http://uaonline.alaska.edu>). The request is valid until a subsequent request to release directory information is received in writing or through UAOnline.

FERPA permits the disclosure of personally identifiable information from students' education records, without consent of the student, if the disclosure meets certain conditions found in §99.31 of the FERPA regulations. Except for disclosures to school officials, disclosures related to some judicial orders or lawfully issued subpoenas, disclosures of directory information, and disclosures to the student, §99.32 of FERPA regulations requires the institution to record the disclosure. Eligible students have a right to inspect and review the record of disclosures.

A postsecondary institution may disclose personally identifiable information from the education records without obtaining prior written consent of the student:

- To other school officials, including teachers, within the university whom the university has determined to have legitimate educational interests. This includes contractors, consultants, volunteers or other parties to whom the university has outsourced institutional services or functions, provided that the conditions listed in §99.31(a)(1)(i)(B)(1) - (a)(1)(i)(B)(2) are met. (§99.31(a)(1))
- To officials of another school where the student seeks or intends to enroll, or where the student is already enrolled if the disclosure is for purposes related to the student's enrollment or transfer, subject to the requirements of §99.34. (§99.31(a)(2))
- To authorized representatives of the U.S. comptroller general, the U.S. attorney general, the U.S. secretary of education, or state and local educational authorities, such as a state postsecondary authority

that is responsible for supervising the university's state-supported education programs. Disclosures under this provision may be made, subject to the requirements of §99.35, in connection with an audit or evaluation of federal- or state-supported education programs, or for the enforcement of or compliance with federal legal requirements that relate to those programs. These entities may make further disclosures of personally identifiable information to outside entities that are designated by them as their authorized representatives to conduct any audit, evaluation, or enforcement or compliance activity on their behalf. (§99.31(a)(3) and 99.35)

- In connection with financial aid for which the student has applied or which the student has received, if the information is necessary to determine eligibility for the aid, determine the amount of the aid, determine the conditions of the aid, or enforce the terms and conditions of the aid. (§99.31(a)(4))
- To organizations conducting studies for, or on behalf of, the university, in order to: (a) develop, validate, or administer predictive tests; (b) administer student aid programs; or (c) improve instruction. (§99.31(a)(6))
- To accrediting organizations to carry out their accrediting functions. (§99.31(a)(7))
- To parents of an eligible student if the student is a dependent for IRS tax purposes. (§99.31(a)(8))
- To comply with a judicial order or lawfully issued subpoena. (§99.31(a)(9))
- To appropriate officials in connection with a health or safety emergency, subject to §99.36. (§99.31(a)(10))
- To a victim of an alleged perpetrator of a crime of violence or a non-forcible sex offense, subject to the requirements of §99.39. The disclosure may only include the final results of the disciplinary proceeding with respect to that alleged crime or offense, regardless of the finding. (§99.31(a)(13))
- To the general public, the final results of a disciplinary proceeding, subject to the requirements of §99.39, if the university determines the student is an alleged perpetrator of a crime of violence or non-forcible sex offense and the student has committed a violation of the university's rules or policies with respect to the allegation made against him or her. (§99.31(a)(14))
- To parents of a student regarding the student's violation of any federal, state, or local law, or of any rule or policy of the university, governing the use or possession of alcohol or a controlled substance if the university determines the student committed a disciplinary violation and the student is under the age of 21. (§99.31(a)(15))

The university does not provide information pertaining to student records to parents or guardians unless the student has provided written permission to do so or when there is a health or safety emergency which warrants such disclosure.

The university does not provide copies of student lists to groups or organizations outside the university except in cases outlined above.

Free Speech and Academic Inquiry

In the pursuit of knowledge, any member of the university community shall be free to investigate and question any fact, context, action, purpose or belief that is encountered in any discipline. Any member

shall be free to articulate discoveries, opinions and judgments that are found or formed in the process. UAA enables and encourages this activity and creates a culture of inquiry that is open to the expression and debate of ideas, whether or not they are popular, judicious or refined.

Gender-Based and Sexual Misconduct Policy

Members of the University of Alaska Anchorage community and visitors have the right to be free from all forms of gender and sex-based discrimination, including sexual violence, sexual harassment, domestic violence, dating violence and stalking. Gender-based and sexual misconduct has a negative impact on victims and other members of our community. UAA expects all members of the community to conduct themselves in a manner that does not infringe upon the rights of others. Therefore, UAA has a zero-tolerance policy for gender-based and sexual misconduct.

UAA prohibits rape, acquaintance rape, sexual assault, sexual harassment, stalking, dating violence and domestic violence. In the event that a sexual assault, or act of stalking, dating violence, or domestic violence does occur, UAA takes the matter very seriously. UAA will take steps to stop the behavior, prevent its recurrence and provide remedies for victims. Individuals with questions about this policy may call the Office of Equity and Compliance at (907) 786-4680.

Harassment

UAA is a community that cherishes the free and open exchange of ideas in the pursuit of knowledge. Maintaining this freedom and openness requires the presence of safety and trust; it requires the absence of coercion, intimidation and exploitation. Harassment subjects its victims to pressures that destroy the conditions necessary for true learning. Faculty, supervisors and the leadership are principally responsible for creating a harassment-free community at UAA and all campus constituents are expected to help maintain a positive working and learning environment. Additionally, all members of the campus community are expected to conduct themselves in a manner that does not infringe upon the rights of others.

Anyone who believes he or she has been a victim of harassment should contact the follow:

UAA Office of Equity and Compliance	(907) 786-0818

Office of the Dean of Students, if alleged harasser is a student	(907) 786-1214

Human Resource Services	(907) 786-4608

U.S. Department of Labor (Office of Federal Contract Compliance Programs, Seattle District Office)	(206) 757-3803

U.S. Department of Education, Office of Civil Rights	(206) 607-1601

UAA takes all matters of sexual harassment, sexual assault and sexual violence seriously. Title IX prohibits gender discrimination in all programs and activities. In accordance with Title IX regulations, UAA has designated the director of the Office of Equity and Compliance as the university's Title IX coordinator responsible for overseeing

UAA's Title IX compliance effort. If you have concerns or need to report an incident, please contact the Title IX Coordinator at uaa_titleix@alaska.edu or visit our website (<http://www.uaa.alaska.edu/equity-and-compliance>) to file an online report.

Undergraduate Programs

The University of Alaska Anchorage provides curricula that offer its students the opportunity to acquire the intellectual skills, habits of mind and ethical sensibilities necessary to develop into individuals who make informed judgments and interpretations about their community and the broader world, who take full responsibility for their beliefs and actions, who recognize the connection between knowing and acting, and who commit themselves to lifelong learning. The UAA curricula emphasize that while the acquisition of knowledge is an end in itself, each UAA graduate must enter the world beyond the university fully equipped to live resiliently in a changing world and be willing to apply theories and methodologies to examine and resolve the problems of their own communities and those of an increasingly diverse and interdependent world.

The university (p. 90) does not prescribe specific courses for all students. It is the responsibility of each student to determine an appropriate program of courses within the framework of their academic program in consultation with an academic advisor (see Advising & Academic Support (p. 56) for further information). The requirements for each degree include completion of a minimum number of courses, resident credits, fulfillment of the General University Requirements and the General Education Requirements (GERs), and completion of program requirements.

Occupational Endorsements and Undergraduate Certificates

The university offers two types of certificates at the undergraduate level:

- Occupational endorsement certificates (OECs) are certificates requiring 29 or fewer credits to complete. These certificates provide the specialized knowledge and skills needed in specific employment sectors.
- Undergraduate certificates of 30 credits or more offer focused instruction in a concentrated area. They include an equivalent of at least 6 credits of related instruction at the collegiate level in communications, computation and human relations. These certificates provide knowledge and skill development in broad enough areas to prepare students for entry into a variety of career fields. They are particularly appropriate in scientific or technical areas such as health care, computer systems, transportation or industrial technology.

Both of these certificate types are noted on transcripts. Coursework used to complete each type may also apply to associate and baccalaureate degrees that the student may pursue.

Associate Degrees

UAA offers two types of associate degrees, both of which require the completion of 60 credits or more:

- The Associate of Arts (AA) degree combines broad studies in written communication, oral communication, humanities, mathematics, natural sciences and social sciences, with elective coursework selected by the student. The degree provides broad exposure to systems of thought and inquiry, allows exploration of a variety of disciplines and learning experiences, and provides a solid foundation for further study at the baccalaureate level. The AA degree is administered by the College of Arts and Sciences (CAS). The complete program description is found under the CAS section (p. 98).
- Associate of Applied Science (AAS) degrees provide applied or specialized studies that are used to satisfy a student's specific educational needs. Many AAS programs prepare students for work in a particular field of employment. Some AAS programs are designed to provide a foundation for a specific related baccalaureate degree. Students in AAS programs build knowledge and skills needed to carry out specific tasks while they develop abilities in the essential elements of communications, computation and human relations.

Baccalaureate Degrees

Baccalaureate, or bachelor's, degrees consist of a minimum of 120 credits and comprise three interrelated parts:

1. *General Education Requirements*, which provide students a broad overview of the liberal arts and sciences and create the foundation for further study in the major or program, lifelong learning and workplace preparedness. GERs are best taken early in a student's academic career.
2. *Major Requirements*, which afford students intensive study in a specialized subject, program or professional area. The major prepares a student for employment and/or graduate-level course work.
3. *Elective Credits*, which are the body of work to complete the 120 credits. These credits may be limited, as in the case of many professional programs, or open for the student's choice, allowing for students to investigate other areas of interest. Students may choose to declare a Minor (generally 18-24 credits from within the Elective credits) to pursue an additional area of study or qualification. A well-selected minor can strongly complement a student's major area of study.

UAA offers a number of Baccalaureate degrees, depending upon the field of study. The two primary types are as follows:

1. The Bachelor of Arts (BA) degrees generally require additional course work in the liberal arts, humanities, and social sciences and offer greater flexibility in elective credits, with a focus upon broad-based achievement in preparation for graduate school, the corporate or business worlds, or education.
2. The Bachelor of Science (BS) degrees generally require additional course work in math and the natural sciences (with labs), with a focus upon discipline-specific technical classes pertaining to particular professions or preparation for advanced study.

If a program offers both a BS and a BA degree, the programs need to be distinct by a minimum of 12 credits.

UAA also offers the Bachelor of Fine Arts (BFA), the Bachelor of Business Administration (BBA), the Bachelor of Human Services (BHS), the Bachelor of Music (BM), and the Bachelor of Social Work (BSW).

Baccalaureate degrees may also have specialized application and entrance requirements as well as specialized completion requirements. Students are strongly advised to speak with an advisor before declaring a major and signing up for classes.

Post-Baccalaureate Certificates

Post-baccalaureate certificate programs present a cohesive sequence of related courses designed to provide continuing education past the baccalaureate level. Upon completion of a certificate, students will have acquired an area of specialization or an interdisciplinary perspective, or will have completed requirements for professional certifications awarded by agencies outside the university. Post-baccalaureate certificates are designed with a majority of undergraduate coursework.

Minors

A minor is a component of a baccalaureate degree. A minor may only be issued simultaneously with a baccalaureate degree. A minor from UAA consists of a minimum of 18 credits, at least 6 of which must be upper division. Students must earn at least 3 credits in residence in each minor field. They must also earn a UAA cumulative grade point average (GPA) of at least 2.00 (C) in the minor. Students must follow minor requirements from the same catalog used for the baccalaureate program. Refer to each discipline for specific requirements. Students must declare minors no later than the deadline to submit an Application for Graduation.

Campus Key

AI	Program delivered through Anchorage
KO	Program delivered through Kodiak
KP	Program delivered through Kenai
MA	Program delivered through Mat-Su
PW	Program delivered through Prince William Sound

College Key

CAS	College of Arts and Sciences
CBPP	College of Business and Public Policy
COEng	College of Engineering
COH	College of Health
CTC	Community & Technical College
HC	University Honors College

Occupational Endorsement Certificates

Program	Campus	College
Advanced Welding* (p. 339)	AI	CTC
Alutiiq Language* (p. 101)	KO	CAS

CAD for Building Construction (suspended) (p. 293)	AI	CTC
Children's Behavioral Health* (p. 224)	AI	COH
Cisco-Certified Network Associate* (p. 316)	AI, MA	CTC
Clinical Assistant (suspended)* (p. 263)	AI	COH
Commercial Refrigeration Systems* (p. 332)	MA	CTC
Conflict Resolution* (p. 247)	AI	COH
Corporate Specified Skills (suspended) (p. 314)	AI	CTC
Corrections* (p. 321)	KP	CTC
Fitness Leadership (suspended) (p. 243)	AI	COH
Limited Radiography (p. 281)	AI	COH
Logistics and Supply Chain Operations (p. 178)	AI	CBPP
Medical Office Coding* (p. 260)	AI	COH
Millwright* (p. 327)	PW	CTC
Nondestructive Testing Technology* (p. 340)	AI	CTC
Office Foundations (suspended at AI, KP) (p. 314)	AI, KO, KP, MA	CTC
Office Support (suspended at AI, KP) (p. 314)	AI, KO, KP, MA	CTC
Pharmacy Technology* (p. 279)	AI	COH
Phlebotomist (p. 263)	AI	COH
Residential and Light Commercial Heating and Ventilation* (p. 333)	MA	CTC
Veterinary Assisting* (p. 338)	MA	CTC
Welding* (p. 340)	AI	CTC

* These programs have been defined as gainful employment programs. For more information regarding program costs and graduation and job placement rates, please visit our gainful employment website at www.uaa.alaska.edu/students/financial-aid/gainful-employment-disclosures.cshtml (<https://www.uaa.alaska.edu/students/financial-aid/gainful-employment-disclosures.cshtml>).

Undergraduate Certificates

Program	Campus	College
Applied Ethics (suspended)* (p. 152)	AI	CAS
Architectural Technology (suspended)* (p. 293)	AI	CTC
Automotive Technology*	AI	CTC

Aviation Maintenance Technology, AI Airframe* (p. 301)	AI	CTC
Aviation Maintenance Technology, AI Powerplant* (p. 302)		CTC
Civic Engagement* (p. 223)	AI	COH
Civil Technology (suspended)* (p. 293)	AI	CTC
Computer and Networking Technology (suspended)* (p. 317)	AI	CTC
Corrections* (p. 322)	KP	CTC
Dental Assisting* (p. 225)	AI	COH
Diesel Power Technology* (p. 297)	AI	CTC
Early Childhood Development (suspended)* (p. 187)	AI	CAS
Geographic Information Systems (suspended)* (p. 216)	AI	COEng
Legal Nurse Consultant Paralegal* (p. 251)	AI	COH
Logistics and Supply Chain Operations* (p. 178)	AI	CBPP
Mechanical and Electrical Technology (suspended)* (p. 293)	AI	CTC
Petroleum Technology* (p. 330)	KP	CTC
Refrigeration and Heating Technology* (p. 334)	MA	CTC
Retail Management (suspended)* (p. 179)	AI	CBPP
Structural Technology (suspended)* (p. 293)	AI	CTC
Welding* (p. 336)	KO	CTC
Welding Technology* (p. 341)	KP	CTC

* These programs have been defined as gainful employment programs. For more information regarding program costs and graduation and job placement rates, please visit our gainful employment website at www.uaa.alaska.edu/students/financial-aid/gainful-employment-disclosures.cshtml (<https://www.uaa.alaska.edu/students/financial-aid/gainful-employment-disclosures.cshtml>).

Associate Degrees

Associate of Applied Science

Program	Campus	College
Accounting (p. 168)	AI, KO, MA	CBPP
Air Traffic Control (p. 303)	AI	CTC
Apprenticeship Technologies (p. 292)	AI	CTC

Architectural and Engineering Technology (suspended) (p. 293)	AI	CTC
Automotive Technology (p. 298)	AI	CTC
Aviation Administration (p. 305)	AI	CTC
Aviation Maintenance Technology (p. 306)	AI	CTC
Business Computer Information Systems (p. 173)	AI	CBPP
Computer Electronics (suspended) (p. 313)	KP	CTC
Computer Information and Office Systems (suspended) (p. 315)	AI, KO, KP, MA	CTC
Computer and Networking Technology (p. 317)	AI, MA	CTC
Computer Systems Technology (suspended at KO) (p. 315)	KO, MA	CTC
Construction Management (p. 318)	AI	CTC
Culinary Arts (p. 323)	AI	CTC
Dental Assisting (p. 226)	AI	COH
Dental Hygiene (suspended) (p. 229)	AI	COH
Diagnostic Medical Sonography (p. 231)	AI	COH
Diesel Power Technology (p. 299)	AI	CTC
Digital Art (suspended) (p. 119)	KP	CAS
Disability Services (suspended) (p. 247)	PW	COH
Early Childhood Development (p. 187)	AI	CAS
Fire and Emergency Services Technology (p. 235)	AI	COH
General Business (p. 179)	KO, KP, MA	CBPP
Geomatics (p. 216)	AI	COEng
Human Services (p. 248)	AI, MA	COH
Industrial Process Instrumentation (p. 325)	KP	CTC
Industrial Technology (suspended) (p. 327)	PW	CTC
Logistics and Supply Chain Operations (p. 180)	AI	CBPP
Medical Assisting (p. 260)	AI	COH
Medical Laboratory Technology (p. 263)	AI	COH
Nursing (p. 268)	AI	COH
Occupational Safety and Health (p. 328)	AI	CTC
Outdoor Leadership (p. 243)	PW	COH

Paralegal Studies (p. 253)	AI	COH
Paramedical Technology (p. 277)	KP, MA	COH
Physical Therapist Assistant (p. 280)	AI	COH
Process Technology (p. 331)	KP	CTC
Professional Piloting (p. 307)	AI	CTC
Radiologic Technology (p. 282)	AI	COH
Refrigeration and Heating Technology (p. 334)	MA	CTC
Small Business Administration (p. 181)	AI, MA	CBPP
Surgical Technology (p. 286)	AI	COH
Technology (p. 336)	KO	CTC
Welding and Nondestructive Testing Technology (p. 342)	AI	CTC

Associate of Arts

Program	Campus	College
Associate of Arts (p. 100)	AI, KO, KP, MA, PW	CAS

Baccalaureate Degrees

Bachelor of Arts

Program	Campus	College
Anthropology (p. 103)	AI	CAS
Art (p. 107)	AI	CAS
Biological Sciences (p. 111)	AI	CAS
Computer Science (p. 207)	AI	COEng
Early Childhood Education (p. 188)	AI	CAS
Economics (p. 171)	AI	CBPP
Elementary Education (p. 194)	AI	CAS
English (p. 120)	AI	CAS
Environment and Society (suspended) (p. 123)	AI	CAS
History (p. 128)	AI	CAS
Hospitality Administration (p. 324)	AI	CTC
Interdisciplinary Studies (p. 344)	AI	CAS
International Studies (p. 130)	AI	CAS
Journalism and Public Communications (p. 133)	AI	CAS
Justice (p. 250)	AI	COH
Languages (p. 135)	AI	CAS
Legal Studies (p. 255)	AI	COH
Mathematics (p. 137)	AI	CAS
Music (p. 141)	AI	CAS
Philosophy (p. 152)	AI	CAS

Political Science (p. 153)	AI	CAS
Psychology (p. 155)	AI	CAS
Sociology (p. 160)	AI	CAS
Theatre (p. 163)	AI	CAS

Bachelor of Business Administration

Program	Campus	College
Accounting (p. 169)	AI	CBPP
Economics (p. 172)	AI	CBPP
Finance (p. 170)	AI	CBPP
Global Logistics and Supply Chain Management (p. 174)	AI	CBPP
Management (p. 182)	AI	CBPP
Management Information Systems (p. 175)	AI	CBPP
Marketing (p. 183)	AI	CBPP

Bachelor of Fine Arts

Program	Campus	College
Art (p. 108)	AI	CAS

Bachelor of Human Services

Program	Campus	College
Bachelor of Human Services (p. 248)	AI	COH

Bachelor of Liberal Studies

Program	Campus	College
Bachelor of Liberal Studies (suspended) (p. 137)	AI	CAS

Bachelor of Music

Program	Campus	College
Bachelor of Music (p. 143)	AI	CAS

Bachelor of Science

Program	Campus	College
Anthropology (p. 104)	AI	CAS
Applied Technologies Leadership (p. 290)	AI	CTC
Aviation Technology (p. 309)	AI	CTC
Biological Sciences (p. 113)	AI	CAS
Chemistry (p. 117)	AI	CAS
Civil Engineering (p. 204)	AI	COEng
Computer Science (p. 208)	AI	COEng
Computer Systems Engineering (p. 210)	AI	COEng
Construction Management (p. 319)	AI	CTC
Dental Hygiene (p. 229)	AI	COH
Dietetics (p. 233)	AI	COH

Electrical Engineering (p. 212)	AI	COEng
Environment and Society (p. 123)	AI	CAS
Geological Sciences (p. 126)	AI	CAS
Geomatics (p. 217)	AI	COEng
Health Sciences (p. 237)	AI	COH
Interdisciplinary Studies (p. 344)	AI	CAS
Mathematics (p. 139)	AI	CAS
Mechanical Engineering (p. 221)	AI	COEng
Medical Laboratory Science (p. 265)	AI	COH
Natural Sciences (p. 146)	AI	CAS
Nursing Science (p. 271)	AI	COH
Nutrition (suspended) (p. 234)	AI	COH
Occupational Safety and Health (p. 329)	AI	CTC
Physical Education (p. 244)	AI	COH
Psychology (p. 157)	AI	CAS
Sociology (p. 161)	AI	CAS

Bachelor of Social Work

Program	Campus	College
Bachelor of Social Work (p. 284)	AI	COH

Minors

Program	Campus	College
Accounting (p. 170)	AI	CBPP
Air Traffic Control (p. 312)	AI	CTC
Alaska Native Business Management (p. 183)	AI	CBPP
Alaska Native Studies (p. 101)	AI	CAS
Anthropology (p. 105)	AI	CAS
Art (p. 110)	AI	CAS
Athletic Training (p. 246)	AI	COH
Aviation Technology (p. 312)	AI	CTC
Business Administration (p. 184)	AI	CBPP
Children's Mental Health (p. 159)	AI	CAS
Communication (p. 134)	AI	CAS
Computer Information Systems (p. 176)	AI	CBPP
Computer Science (p. 209)	AI	COEng
Computer Systems Engineering (p. 212)	AI	COEng
Creative Writing and Literary Arts (p. 122)	AI	CAS
Dance (p. 165)	AI	CAS

Early Childhood Special Education (p. 199)	AI	CAS
Economics (p. 172)	AI	CBPP
Electrical Engineering (p. 214)	AI	COEng
Elementary Special Education (p. 200)	AI	CAS
English (p. 122)	AI	CAS
Entrepreneurship (p. 183)	AI	CBPP
Environmental Studies (p. 125)	AI	CAS
Geographic Information Systems (GIS) (p. 219)	AI	COEng
History (p. 129)	AI	CAS
Human Services (p. 249)	AI	COH
International Business (p. 184)	AI	CBPP
International Studies (p. 132)	AI	CAS
Justice (p. 251)	AI	COH
Languages (p. 136)	AI	CAS
Legal Studies (p. 257)	AI	COH
Mathematics (p. 140)	AI	CAS
Mechanical Engineering (p. 223)	AI	COEng
National Defense, Strategic Studies, and Leadership: Air Force (p. 290)	AI	CTC
National Defense, Strategic Studies, and Leadership: Army (p. 295)	AI	CTC
Nutrition (p. 235)	AI	COH
Outdoor Leadership (p. 246)	AI	COH
Philosophy (p. 152)	AI	CAS
Physics (p. 153)	AI	CAS
Political Science (p. 154)	AI	CAS
Psychology (p. 159)	AI	CAS
Public Health (p. 242)	AI	COH
Real Estate (p. 185)	AI	CBPP
Secondary Special Education (p. 200)	AI	CAS
Social Welfare Studies (p. 286)	AI	COH
Sociology (p. 162)	AI	CAS
Speech-Language Pathology (p. 201)	AI	CAS
Women's Studies (p. 165)	AI	CAS

Post-Baccalaureate Certificate Programs

Program	Campus	College
Early Childhood: Pre-K through Third Grade* (p. 191)	AI	CAS
Elementary Education (p. 197)	AI	CAS
Paralegal Studies (p. 258)	AI	COH

Speech-Language Pathology (p. 201)	AI	CAS

* *These programs have been defined as gainful employment programs. For more information regarding program costs and graduation and job placement rates, please visit our gainful employment website at www.uaa.alaska.edu/students/financial-aid/gainful-employment-disclosures.cshtml (<https://www.uaa.alaska.edu/students/financial-aid/gainful-employment-disclosures.cshtml>).*

Specialty Programs

(No degree or certificate awarded)

Program	Campus	College
Air Force ROTC (p. 288)		CTC
Army ROTC (p. 293)		CTC
Forty-Ninth State Fellows (suspended) (p. 344)		HC
Natural and Complex Systems (p. 344)		HC
University Honors Scholar (p. 343)		HC

Non-Academic Programs

Workforce Credentials

(Contact the associated college for more information)

Program	Campus	College
Bridge to College and Careers		CTC
Leadership Education in Neurodevelopmental Disabilities (LEND)		COH
Bridge to Independence through Career Readiness		COH

Programs Delivered at the Anchorage Campus

Occupational Endorsement Certificates

Program	Campus	College
Advanced Welding* (p. 339)	AI	CTC
CAD for Building Construction (suspended) (p. 293)	AI	CTC
Children's Behavioral Health* (p. 224)	AI	COH
Cisco-Certified Network Associate* (p. 316)	AI, MA	CTC
Clinical Assistant (suspended)* (p. 263)	AI	COH
Conflict Resolution* (p. 247)	AI	COH
Corporate Specified Skills (suspended) (p. 314)	AI	CTC

Fitness Leadership (suspended) (p. 243)	AI	COH
Limited Radiography (p. 281)	AI	COH
Logistics and Supply Chain Operations (p. 178)	AI	CBPP
Medical Office Coding* (p. 260)	AI	COH
Nondestructive Testing Technology* (p. 340)	AI	CTC
Office Foundations (suspended at AI, KP) (p. 314)	AI, KO, KP, MA	CTC
Office Support (suspended at AI, KP) (p. 314)	AI, KO, KP, MA	CTC
Pharmacy Technology* (p. 279)	AI	COH
Phlebotomist (p. 263)	AI	COH
Welding* (p. 340)	AI	CTC

Undergraduate Certificates

Program	Campus	College
Applied Ethics (suspended)* (p. 152)	AI	CAS
Architectural Technology (suspended)* (p. 293)	AI	CTC
Automotive Technology* (p. 296)	AI	CTC
Aviation Maintenance Technology, AI Airframe* (p. 301)		CTC
Aviation Maintenance Technology, AI Powerplant* (p. 302)		CTC
Civic Engagement* (p. 223)	AI	COH
Civil Technology (suspended)* (p. 293)	AI	CTC
Computer and Networking Technology (suspended)* (p. 317)	AI	CTC
Dental Assisting* (p. 225)	AI	COH
Diesel Power Technology* (p. 297)	AI	CTC
Early Childhood Development (suspended)* (p. 187)	AI	CAS
Geographic Information Systems (suspended)* (p. 216)	AI	COEng
Legal Nurse Consultant Paralegal* (p. 251)	AI	COH
Logistics and Supply Chain Operations* (p. 178)	AI	CBPP
Mechanical and Electrical Technology (suspended)* (p. 293)	AI	CTC
Retail Management (suspended)* (p. 179)	AI	CBPP

Structural Technology (suspended)* (p. 293)	AI	CTC

Associate Degrees

Associate of Applied Science

Program	Campus	College
Accounting (p. 168)	AI, KO, MA	CBPP
Air Traffic Control (p. 303)	AI	CTC
Apprenticeship Technologies (p. 292)	AI	CTC
Architectural and Engineering Technology (suspended) (p. 293)	AI	CTC
Automotive Technology (p. 298)	AI	CTC
Aviation Administration (p. 305)	AI	CTC
Aviation Maintenance Technology (p. 306)	AI	CTC
Business Computer Information Systems (p. 173)	AI	CBPP
Computer Information and Office Systems (suspended) (p. 315)	AI, KO, KP, MA	CTC
Computer and Networking Technology (p. 317)	AI, MA	CTC
Construction Management (p. 318)	AI	CTC
Culinary Arts (p. 323)	AI	CTC
Dental Assisting (p. 226)	AI	COH
Dental Hygiene (suspended) (p. 229)	AI	COH
Diagnostic Medical Sonography (p. 231)	AI	COH
Diesel Power Technology (p. 299)	AI	CTC
Early Childhood Development (p. 187)	AI	CAS
Fire and Emergency Services Technology (p. 235)	AI	COH
Geomatics (p. 216)	AI	COEng
Human Services (p. 248)	AI, MA	COH
Logistics and Supply Chain Operations (p. 180)	AI	CBPP
Medical Assisting (p. 260)	AI	COH
Medical Laboratory Technology (p. 263)	AI	COH
Nursing (p. 268)	AI	COH
Occupational Safety and Health (p. 328)	AI	CTC
Paralegal Studies (p. 253)	AI	COH

Physical Therapist Assistant (p. 280)	AI	COH

Professional Piloting (p. 307)	AI	CTC
Radiologic Technology (p. 282)	AI	COH
Small Business Administration (p. 181)	AI, MA	CBPP
Surgical Technology (p. 286)	AI	COH
Welding and Nondestructive Testing Technology (p. 342)	AI	CTC

Associate of Arts

Program	Campus	College
Associate of Arts (p. 100)	AI, KO, KP, MA, PW	CAS

Baccalaureate Degrees

Bachelor of Arts

Program	Campus	College
Anthropology (p. 103)	AI	CAS
Art (p. 107)	AI	CAS
Biological Sciences (p. 111)	AI	CAS
Computer Science (p. 207)	AI	COEng
Early Childhood Education (p. 188)	AI	CAS
Economics (p. 171)	AI	CBPP
Elementary Education (p. 194)	AI	CAS
English (p. 120)	AI	CAS
Environment and Society (suspended) (p. 123)	AI	CAS
History (p. 128)	AI	CAS
Hospitality and Restaurant Management (http:// catalog.uaa.alaska.edu/ undergraduateprograms/ ctc/culinaryarts/ba- hospitalityandrestaurantmanagement)	AI	CTC
Interdisciplinary Studies (p. 344)	AI	CAS
International Studies (p. 130)	AI	CAS
Journalism and Public Communications (p. 133)	AI	CAS
Justice (p. 250)	AI	COH
Languages (p. 135)	AI	CAS
Legal Studies (p. 255)	AI	COH
Mathematics (p. 137)	AI	CAS
Music (p. 141)	AI	CAS
Philosophy (p. 152)	AI	CAS
Political Science (p. 153)	AI	CAS
Psychology (p. 155)	AI	CAS

Sociology (p. 160)	AI	CAS
Theatre (p. 163)	AI	CAS

Bachelor of Business Administration

Program	Campus	College
Accounting (p. 169)	AI	CBPP
Economics (p. 172)	AI	CBPP
Finance (p. 170)	AI	CBPP
Global Logistics and Supply Chain Management (p. 174)	AI	CBPP
Management (p. 182)	AI	CBPP
Management Information Systems (p. 175)	AI	CBPP
Marketing (p. 183)	AI	CBPP

Bachelor of Fine Arts

Program	Campus	College
Art (p. 108)	AI	CAS

Bachelor of Human Services

Program	Campus	College
Bachelor of Human Services (p. 248)	AI	COH

Bachelor of Liberal Studies

Program	Campus	College
Bachelor of Liberal Studies (suspended) (p. 137)	AI	CAS

Bachelor of Music

Program	Campus	College
Bachelor of Music (p. 143)	AI	CAS

Bachelor of Science

Program	Campus	College
Anthropology (p. 104)	AI	CAS
Applied Technologies Leadership (http://catalog.uaa.alaska.edu/undergraduateprograms/ctc/technology/bs-technology)	AI	CTC
Aviation Technology (p. 309)	AI	CTC
Biological Sciences (p. 113)	AI	CAS
Chemistry (p. 117)	AI	CAS
Civil Engineering (p. 204)	AI	COEng
Computer Science (p. 208)	AI	COEng
Computer Systems Engineering (p. 210)	AI	COEng
Construction Management (p. 319)	AI	CTC
Dental Hygiene (p. 229)	AI	COH
Dietetics (p. 233)	AI	COH
Electrical Engineering (p. 212)	AI	COEng

Environment and Society (p. 123)	AI	CAS
Geological Sciences (p. 126)	AI	CAS
Geomatics (p. 217)	AI	COEng
Health Sciences (p. 237)	AI	COH
Interdisciplinary Studies (p. 344)	AI	CAS
Mathematics (p. 139)	AI	CAS
Mechanical Engineering (p. 221)	AI	COEng
Medical Laboratory Science (p. 265)	AI	COH
Natural Sciences (p. 146)	AI	CAS
Nursing Science (p. 271)	AI	COH
Nutrition (suspended) (p. 234)	AI	COH
Occupational Safety and Health (p. 329)	AI	CTC
Physical Education (p. 244)	AI	COH
Psychology (p. 157)	AI	CAS
Sociology (p. 161)	AI	CAS

Bachelor of Social Work

Program	Campus	College
Bachelor of Social Work (p. 284)	AI	COH

Minors

Program	Campus	College
Accounting (p. 170)	AI	CBPP
Air Traffic Control (p. 312)	AI	CTC
Alaska Native Business Management (p. 183)	AI	CBPP
Alaska Native Studies (p. 101)	AI	CAS
Anthropology (p. 105)	AI	CAS
Art (p. 110)	AI	CAS
Athletic Training (p. 246)	AI	COH
Aviation Technology (p. 312)	AI	CTC
Business Administration (p. 184)	AI	CBPP
Children's Mental Health (p. 159)	AI	CAS
Communication (p. 134)	AI	CAS
Computer Information Systems (p. 176)	AI	CBPP
Computer Science (p. 209)	AI	COEng
Computer Systems Engineering (p. 212)	AI	COEng
Creative Writing and Literary Arts (p. 122)	AI	CAS
Dance (p. 165)	AI	CAS

Early Childhood Special Education (p. 199)	AI	CAS
Economics (p. 172)	AI	CBPP
Electrical Engineering (p. 214)	AI	COEng
English (p. 122)	AI	CAS
Entrepreneurship (p. 183)	AI	CBPP
Environmental Studies (p. 125)	AI	CAS
Geographic Information Systems (GIS) (p. 219)	AI	COEng
History (p. 129)	AI	CAS
Human Services (p. 249)	AI	COH
International Business (p. 184)	AI	CBPP
International Studies (p. 132)	AI	CAS
Justice (p. 251)	AI	COH
Languages (p. 136)	AI	CAS
Legal Studies (p. 257)	AI	COH
Mathematics (p. 140)	AI	CAS
Mechanical Engineering (p. 223)	AI	COEng
National Defense, Strategic Studies, and Leadership: Air Force (p. 290)	AI	CTC
National Defense, Strategic Studies, and Leadership: Army (p. 295)	AI	CTC
Nutrition (p. 235)	AI	COH
Outdoor Leadership (p. 246)	AI	COH
Philosophy (p. 152)	AI	CAS
Physics (p. 153)	AI	CAS
Political Science (p. 154)	AI	CAS
Psychology (p. 159)	AI	CAS
Public Health (p. 242)	AI	COH
Real Estate (p. 185)	AI	CBPP
Social Welfare Studies (p. 286)	AI	COH
Sociology (p. 162)	AI	CAS
Elementary Special Education (p. 200)	AI	CAS
Speech-Language Pathology (p. 201)	AI	CAS
Women's Studies (p. 165)	AI	CAS
Secondary Special Education (p. 200)	AI	CAS

Post-Baccalaureate Certificate Programs

Program	Campus	College
Early Childhood: Pre-K through Third Grade* (p. 191)	AI	CAS
Elementary Education (p. 197)	AI	CAS
Paralegal Studies (p. 258)	AI	COH

Speech-Language Pathology (p. 201)	AI	CAS

Specialty Programs

(No degree or certificate awarded)

Program	Campus	College
Air Force ROTC (p. 288)		CTC
Army ROTC (p. 293)		CTC
Forty-Ninth State Fellows (suspended) (p. 344)		HC
Natural and Complex Systems (p. 344)		HC
University Honors Scholar (p. 343)		HC

* *These programs have been defined as gainful employment programs. For more information regarding program costs and graduation and job placement rates, please visit our gainful employment website at www.uaa.alaska.edu/students/financial-aid/gainful-employment-disclosures.cshtml (<https://www.uaa.alaska.edu/students/financial-aid/gainful-employment-disclosures.cshtml>).*

Non-Academic Programs

Workforce Credentials

(Contact the associated college for more information)

Program	Campus	College
Bridge to College and Careers		CTC
Leadership Education in Neurodevelopmental Disabilities (LEND)		COH
Tapestry Postsecondary Transition Program		COH

Programs Delivered at Kenai Peninsula College

Occupational Endorsement Certificates

Program	Campus	College
Corrections* (p. 321)	KP	CTC
Office Foundations (suspended at AI, KP) (p. 314)	AI, KO, KP, MA	CTC
Office Support (suspended at AI, KP) (p. 314)	AI, KO, KP, MA	CTC

Undergraduate Certificates

Program	Campus	College
Corrections* (p. 322)	KP	CTC
Petroleum Technology* (p. 330)	KP	CTC
Welding Technology* (p. 341)	KP	CTC

Associate of Applied Science

Program	Campus	College
Computer Electronics (suspended) (p. 313)	KP	CTC
Computer Information and Office Systems (suspended) (p. 315)	AI, KO, KP, MA	CTC
Digital Art (suspended) (p. 119)	KP	CAS
General Business (p. 179)	KO, KP, MA	CBPP
Industrial Process Instrumentation (p. 325)	KP	CTC
Paramedical Technology (p. 277)	KP, MA	COH
Process Technology (p. 331)	KP	CTC

Associate of Arts

Program	Campus	College
Associate of Arts (p. 100)	AI, KO, KP, MA, PW	CAS

* These programs have been defined as gainful employment programs. For more information regarding program costs and graduation and job placement rates, please visit our gainful employment website at www.uaa.alaska.edu/students/financial-aid/gainful-employment-disclosures.cshhtml (<https://www.uaa.alaska.edu/students/financial-aid/gainful-employment-disclosures.cshhtml>).

Programs Delivered at Kodiak College

Occupational Endorsement Certificates

Program	Campus	College
Alutiiq Language* (p. 101)	KO	CAS
Office Foundations (suspended at AI, KP) (p. 314)	AI, KO, KP, MA	CTC
Office Support (suspended at AI, KP) (p. 314)	AI, KO, KP, MA	CTC

Undergraduate Certificates

Program	Campus	College
Welding* (p. 336)	KO	CTC

Associate of Applied Science

Program	Campus	College
Accounting (p. 168)	AI, KO, MA	CBPP
Computer Information and Office Systems (suspended) (p. 315)	AI, KO, KP, MA	CTC
Computer Systems Technology (suspended at KO) (p. 315)	KO, MA	CTC
General Business (p. 179)	KO, KP, MA	CBPP
Technology (p. 336)	KO	CTC

Associate of Arts

Program	Campus	College
Associate of Arts (p. 100)	AI, KO, KP, MA, PW	CAS

* These programs have been defined as gainful employment programs. For more information regarding program costs and graduation and job placement rates, please visit our gainful employment website at www.uaa.alaska.edu/students/financial-aid/gainful-employment-disclosures.cshhtml (<https://www.uaa.alaska.edu/students/financial-aid/gainful-employment-disclosures.cshhtml>).

Programs Delivered at Matanuska-Susitna College

Occupational Endorsement Certificates

Program	Campus	College
Cisco-Certified Network Associate* (p. 316)	AI, MA	CTC
Commercial Refrigeration Systems* (p. 332)	MA	CTC
Office Foundations (suspended at AI, KP) (p. 314)	AI, KO, KP, MA	CTC
Office Support (suspended at AI, KP) (p. 314)	AI, KO, KP, MA	CTC
Residential and Light Commercial Heating and Ventilation* (p. 333)	MA	CTC
Veterinary Assisting* (p. 338)	MA	CTC

Undergraduate Certificate

Program	Campus	College
Refrigeration and Heating Technology* (p. 334)	MA	CTC

Associate of Applied Science

Program	Campus	College
Accounting (p. 168)	AI, KO, MA	CBPP
Computer Information and Office Systems (suspended) (p. 315)	AI, KO, KP, MA	CTC
Computer and Networking Technology (p. 317)	AI, MA	CTC
Computer Systems Technology (suspended at KO) (p. 315)	KO, MA	CTC
General Business (p. 179)	KO, KP, MA	CBPP
Human Services (p. 248)	AI, MA	COH
Paramedical Technology (p. 277)	KP, MA	COH
Refrigeration and Heating Technology (p. 334)	MA	CTC

Small Business Administration AI, MA CBPP
(p. 181)

Associate of Arts

Program	Campus	College
Associate of Arts (p. 100)	AI, KO, KP, MA, PW	CAS

* These programs have been defined as gainful employment programs. For more information regarding program costs and graduation and job placement rates, please visit our gainful employment website at www.uaa.alaska.edu/students/financial-aid/gainful-employment-disclosures.cshtml (<https://www.uaa.alaska.edu/students/financial-aid/gainful-employment-disclosures.cshtml>).

Programs Delivered at Prince William Sound College

Occupational Endorsement Certificates

Program	Campus	College
Millwright* (p. 327)	PW	CTC

Associate of Applied Science

Program	Campus	College
Disability Services (suspended) (p. 247)	PW	COH
Industrial Technology (suspended) (p. 327)	PW	CTC
Outdoor Leadership (p. 243)	PW	COH

Associate of Arts

Program	Campus	College
Associate of Arts (p. 100)	AI, KO, KP, MA, PW	CAS

* These programs have been defined as gainful employment programs. For more information regarding program costs and graduation and job placement rates, please visit our gainful employment website at www.uaa.alaska.edu/students/financial-aid/gainful-employment-disclosures.cshtml (<https://www.uaa.alaska.edu/students/financial-aid/gainful-employment-disclosures.cshtml>).

Occupational Endorsement Certificates (OECs)

General University Requirements

1. Students must be admitted to the program and must complete the certificate program requirements listed for their program. Each program is listed under its offering college.

2. Students must complete at least 30 percent of the program in residence at UAA. Additional residency credit requirements, to meet discipline or accreditation standards, may be established.
3. Students must earn a cumulative GPA of at least 2.00 (C) at UAA. Some certificate programs require higher GPAs.
4. Students must earn a minimum of 9 credits for an occupational endorsement certificate.
5. Controlling Catalog:
 - a. Students may elect to graduate under the requirements of any catalog in effect during the five years of formal acceptance.
 - b. If the requirements for a certificate, as specified in the entry-year catalog, are not met within five years of formal acceptance into the program, admission expires and the student must reapply for admission and meet the admission and graduation requirements in effect at the time of formal acceptance. Program requirements may require completion in less than five years.
6. Students may earn more than one certificate by completing all requirements for each additional program.
7. Occupational endorsement certificates must differ by 3 or more credits.

Please note that not all occupational endorsement certificates are eligible for federal financial aid.

Undergraduate Certificates

General University Requirements

1. Students must be admitted to the program and must complete the certificate program requirements listed for their program. Each program is listed under its offering college.
2. When completing the last half of a certificate program, students must earn at least 50 percent of the credits in residence. For example, in a 30-credit certificate program, at least 8 of the last 15 must be resident credits. Additional residency credit requirements, to meet discipline or accreditation standards, may be established.
3. Students must earn a cumulative GPA of at least 2.00 (C) at UAA. Some certificate programs require higher GPAs.
4. Students must earn a minimum of 30 credits at the 100 level or above for an undergraduate certificate.
5. Controlling Catalog:
 - a. Students may elect to graduate under the requirements of any catalog in effect during the five years after formal acceptance to the program.
 - b. If the requirements for a certificate, as specified in the entry-year catalog, are not met within five years of formal acceptance into the program, admission expires and the student must reapply for admission and meet the admission and graduation requirements in effect at the time of formal acceptance.
6. Students may earn more than one certificate by completing all requirements for each additional program.
7. Undergraduate certificates that share a common core must differ by at least 6 credits.

Associate of Applied Science (AAS) Degrees

General University Requirements

1. Students must be admitted to the degree program and complete the General Course Requirements (p. 83) for AAS Degrees.
2. Students must complete the major degree requirements listed for their program. Each program is listed under its offering college.
3. Students must earn a minimum of 60 credits at the 100-level or above for an AAS.
4. Students must complete at least 15 credits in residence. Additional residency credit requirements, to meet program accreditation standards, may be established.
5. Students must earn a cumulative GPA of at least 2.00 (C) at UAA. They must also earn a cumulative GPA of at least 2.00 (C) in all courses required for each major. Some associate degree programs may require higher GPAs.
6. Controlling Catalog:
 - a. Students may elect to graduate under the requirements of any catalog in effect during the five years of formal acceptance.
 - b. If the requirements for an associate degree, as specified in the entry-year catalog, are not met within five years of formal acceptance into the program, admission expires and the student must reapply for admission and meet the admission and graduation requirements in effect at the time of formal acceptance.

AAS Policies

Multiple Associate Degrees or Concurrent Majors

Associate degree-seeking students may graduate (during the same semester) with two degrees, provided they have applied to and been accepted in both degree programs. (An Associate of Applied Science and Associate of Arts is an example.) Because the Associate of Arts is intended to provide a broad education and includes no major specialty, students may earn only one AA degree.

Students must submit a separate Application for Admission for each degree they expect to receive. Admission forms are available from the Office of Admissions (<http://www.uaa.alaska.edu/admissions>).

Students seeking a second associate degree must be admitted to the program and must complete the General University Requirements for that degree, the degree requirements for both programs, and at least 12 resident credits earned after the posting of the primary degree. Students seeking both an associate degree and a baccalaureate degree must be admitted to both programs (or have completed one program) and must complete the General University Requirements and degree-specific requirements for both degrees.

Students may elect to graduate under the requirements of any catalog in effect (p. 29) during the five years after formal acceptance to the program.

Transfer Students

Students who have received a baccalaureate degree from another regionally accredited college or university and who want to obtain an associate degree from UAA must:

1. Meet program admission requirements;
2. Complete the General University Requirements but not the General Education Requirements or General Course Requirements; and
3. Complete the major program requirements.

Double Majors for AAS Programs

Associate of Applied Science degrees are intended to provide specialized education. Therefore, they do include a major specialty and students may earn more than one AAS.

Associate of Applied Science degree-seeking students may apply to graduate (during the same semester) with two majors. For example, a student may select two areas from the approved majors within the AAS degree program (such as Welding and Automotive Technology).

Once formally admitted, students may add a second major through the Change of Major degree process. Forms are available on the Office of the Registrar's website (<http://www.uaa.alaska.edu/records/registrarforms.cfm>). Students must satisfy the General University Requirements, the General Course Requirements and both sets of major requirements.

Students may elect to graduate under the requirements of any catalog in effect (p. 29) during the five years after formal acceptance to the program.

A double major is not applicable to the Associate of Arts degree.

General Course Requirements for AAS Degrees

To receive an Associate of Applied Science, students must be admitted to the program and must satisfy:

- General University Requirements for Associate of Applied Science Degrees (p. 83).
- General Course Requirements for Associate of Applied Science Degrees listed below. AAS students who intend to pursue a baccalaureate degree should consult a faculty or academic advisor for appropriate course selections. (15 credits)

Code	Title	Credits
Oral Communication Skills		3
COMM A111	Fundamentals of Oral Communication	
COMM A235	Small Group Communication	
COMM A237	Interpersonal Communication	

COMM A241	Public Speaking	
Written Communication Skills		6
CIOA A260A	Business Communications	
WRTG A111	Writing Across Contexts	
WRTG A211	Writing and the Humanities	
WRTG A212	Writing and the Professions	
WRTG A213	Writing and the Sciences	
WRTG A214	Arguing Across Contexts	
Designated Disciplines		6
Choose an additional 6 credits in humanities, math, natural sciences or social sciences from the classification list below. Courses must be at the 100 level or higher. *		
Total Credits		15

* Any course in humanities, mathematics, natural sciences, or social sciences from the General Education Requirements for baccalaureate degrees (p. 86) may be applied toward the General Course Requirements in designated disciplines for Associate of Applied Science degrees.

- Degree specific requirements (credits vary)
- Electives (credits vary)
- Total minimum credits for an Associate of Applied Science degree: 60 (All courses must be at the 100 level or above.)

General Course Requirement Classification List for AAS Degrees

These General Course Requirements are designed to ensure that all students graduating with AAS degrees have demonstrated fundamental written and oral communication skills and have successfully performed at the collegiate level in at least one of the listed discipline areas (humanities, mathematics, natural science or social science).

The design of AAS degrees, like that of undergraduate certificates, ensures further that students gain some proficiency in essential skills of communication, computation and human relations. In the absence of specific required courses in these areas, the degrees address these topics in the program requirements and measure student performance in those classes.

Humanities

- Alaska Native Studies
- American Sign Language
- Art
- Chinese
- Communication
- Creative Writing and Literary Arts
- Dance
- English
- French
- German
- History
- Humanities

- Japanese
- Latin
- Liberal Studies Integrated Core
- Linguistics
- Music
- Philosophy
- Political Science (PS A331, PS A332 and PS A333 only)
- Russian
- Spanish
- Theatre
- Writing

Mathematics and Natural Sciences

- Anthropology (ANTH A205 only)
- Astronomy
- Biological Sciences
- Chemistry
- Computer Science
- Environmental Studies (ENVI A211 only)
- Geography
- Geology
- Liberal Studies Integrated Science
- Mathematics
- Philosophy (PHIL A101 only)
- Physics
- Statistics

Social Sciences

- Anthropology
- Business Administration (BA A151 only)
- Counseling
- Economics
- Environmental Studies (ENVI A212 only)
- Geography
- Guidance
- Health Sciences (HS A220 only)
- International Studies
- Journalism and Public Communications (JPC A204 only)
- Justice (JUST A110, JUST A251, JUST A330 and JUST A375 only)
- Legal Studies (LEGL A101 only)
- Liberal Studies Social Sciences
- Political Science
- Psychology
- Social Work (SWK A106 and SWK A243 only)
- Sociology
- Women's Studies

Associate of Arts (AA) Degree

General University Requirements

1. Students must be admitted to the program and must complete the degree requirements listed in the Associate of Arts program description (p. 100).
2. Students must complete at least 15 credits in residence. Additional residency credit requirements, to meet program accreditation standards, may be established.
3. Students must earn a cumulative GPA of at least 2.00 (C) at UAA.
4. Controlling Catalog:
 - a. Students may elect to graduate under the requirements of any catalog in effect during the five years of formal acceptance.
 - b. If the requirements for an associate degree, as specified in the entry-year catalog, are not met within five years of formal acceptance into the program, admission expires and the student must reapply for admission and meet the admission and graduation requirements in effect at the time of formal acceptance.
5. Students must complete a minimum of 60 credits at the 100 level or above for an AA degree.

See the complete Associate of Arts program description (p. 100) under the College of Arts and Sciences.

Baccalaureate Degrees

General University Requirements

1. Students must earn at least 120 credits at the 100-level and above. Some degree programs require completion of additional credits.
2. Students must earn at least 42 upper-division credits, including 24 upper-division credits in residence. Some degree programs require completion of additional upper-division credits.
3. Students must earn at least 30 credits in residence. In addition, transfer students must earn in residence at least 12 credits in each major field and, where applicable, at least 3 credits in each minor field. Additional residency credit requirements, to meet program accreditation standards, may be established.
4. Students must earn a cumulative GPA of at least 2.00 (C) at UAA. They must also earn a cumulative GPA of at least 2.00 (C) in all courses required for each major and each minor. Some degree programs may require higher GPAs.
5. Controlling Catalog:
 - a. Students may elect to graduate under the requirements of any catalog in effect during the seven years of formal acceptance (p. 29).
 - b. If the requirements for a baccalaureate degree, as specified in the entry-year catalog, are not met within seven years of formal acceptance (p. 29) into the program, admission expires and the student must reapply for admission and meet the admission and graduation requirements in effect at the time of formal acceptance.
 - c. Students must follow established UAA procedures for declaring a major and for changing a major or degree. Students

who change their major or degree must satisfy the catalog requirements for the new major or degree in effect at the time of the change.

Baccalaureate Degree Policies

Baccalaureate Degree Requirements

To receive a baccalaureate degree from UAA, students must be admitted to the program and must satisfy:

- General University Requirements (<https://catalog.uaa.alaska.edu/undergraduateprograms/baccalaureaterequirements>)
- General Education Requirements (<https://catalog.uaa.alaska.edu/undergraduateprograms/baccalaureaterequirements/gers>)
- School/college requirements, if applicable
- Major program requirements

For school/college and major program requirements, refer to the appropriate school or college pages of this catalog.

Concurrent Baccalaureate Programs

Double Majors

Baccalaureate degree-seeking students may graduate (during the same semester) with two majors, provided that the degree is the same for each major. For example, a student may select two areas from the approved majors within a Bachelor of Arts degree program (such as History and Justice). Students must apply for and be accepted into each major. Students may add a second major at a later date through the change of major/degree process. Forms are available on the Office of the Registrar's website (<https://www.uaa.alaska.edu/students/registrar/registrarforms.cshtml>). Students must satisfy the General University Requirements, the General Education Requirements for the primary program, both sets of school/college requirements, if applicable, and major program requirements. Students may elect to graduate under the requirements of any catalog in effect during the seven years after formal acceptance (p. 29) to a baccalaureate degree program.

Multiple Degrees

Baccalaureate degree-seeking students may graduate (during the same semester) with multiple degrees provided they have applied for and been accepted in each degree program. Students must submit a separate Application for Admission and Application for Graduation for each degree they expect to complete. Students can apply for admission online through the Office of Admissions website (<https://www.uaa.alaska.edu/admissions>). Students can apply for graduation through their UAOnline (<https://uaonline.alaska.edu>) account. Students may elect to graduate under the requirements of any catalog in effect during the seven years after formal acceptance (p. 29) to a baccalaureate degree program. Baccalaureate degree-seeking students must complete the General University Requirements, the General Education Requirements, school/college requirements, if applicable, all major program requirements, and at least 24 resident credits beyond each degree completed (i.e., if the first degree requires a total of 120 credits, the second requires at least 144 total credits, and the third requires at least 168 total credits, etc.).

Second Baccalaureate Degree

UAA Students

Students who have received a baccalaureate degree from UAA, who return and want to obtain another baccalaureate degree must:

- 1. Meet admission requirements.
- 2. Complete at least 24 resident credits after the posting of the previous baccalaureate degree(s) awarded.
- 3. Complete the school/college requirements, if applicable, and the major program requirements, including any resident and/or upper division requirements, for the second degree.
- 4. Maintain a cumulative GPA of at least 2.00 (C) at UAA in order to graduate. Some programs may require a higher GPA in the major.

Transfer Students

Students who have received a baccalaureate degree from another regionally accredited college or university and who want to obtain a baccalaureate degree from UAA must:

- 1. Meet admission requirements.
- 2. Complete the General University Requirements but not the General Education Requirements.
- 3. Complete all school/college requirements, if applicable, and the major program requirements.

General Education Requirements (GERs) for Baccalaureate Degrees

General Education Requirements (GERs) provide students with a common educational experience in order to provide a foundation for further study and broaden the educational experience of every degree-seeking student. They are designed to promote an elevation of the student’s level in basic college-level skills (Tier 1), a breadth of exposure to traditional academic disciplines (Tier 2), and an understanding of how to integrate and apply knowledge to an evolving world (Tier 3).

UAA’s General Education Values

Develop intellectual and practical skills across the curriculum, including inquiry and analysis, quantitative literacy, critical and creative thinking, problem solving, written and oral communication, information literacy, and collaborative learning.

Build knowledge of human institutions, socio-cultural processes, and the physical and natural world through study of the natural and social sciences, mathematics, humanities, and the arts.

Acquire tools for effective civic engagement in local through global contexts, including ethical reasoning and intercultural competence, with particular emphasis on Alaska and the circumpolar north.

Integrate and apply learning, including ability to synthesize knowledge and skills across general and specialized studies, adapting them to new

settings, questions, and responsibilities, and forming a foundation for lifelong learning.

GER Student Learning Outcomes

After completing the GERs, UAA students shall be able to:

- Communicate effectively in a variety of contexts and formats.
- Reason mathematically and analyze quantitative and qualitative data competently to reach sound conclusions.
- Relate knowledge to the historical context in which it developed and the human problems it addresses.
- Interpret different systems of aesthetic representation and understand their historical and cultural contexts.
- Investigate the complexity of human institutions and behavior to better understand interpersonal, group and cultural dynamics.
- Identify ways in which science has advanced the understanding of important natural processes.
- Locate and use relevant information to make appropriate personal and professional decisions.
- Adopt critical perspectives for understanding the forces of globalization and diversity.
- Integrate knowledge and employ skills gained to synthesize creative thinking, critical judgment and personal experience in a meaningful and coherent manner.

Code	Title	Credits
Tier 1: Basic College-Level Skills		12
Tier 2: Disciplinary Areas		22
Tier 3: Integrative Capstone		3
Total Credits		37

All students should consult a faculty or academic advisor for appropriate course selections.

- Baccalaureate students are required to complete 12 credits of basic college-level skills (oral, written and quantitative) before completing 60 total degree applicable credits.
- Each of the eight GER classifications has a list of approved courses (see the General Education Requirements classification lists). Only courses from the GER classification list may be used to satisfy a distribution area requirement.
- Courses used to satisfy distribution area requirements in General Education may also be used to satisfy school/college requirements and/or degree/program requirements, but no course may be counted in more than one GER category.
- Courses ending with numbers _93 or _94 cannot satisfy a GER, and UAA courses not on the approved GER classification list cannot be petitioned to meet a GER.

Petitions for GERs and/or General University Requirements

Petitions pertaining to GERs and/or General University Requirements must be processed through the Office of Academic Affairs, with final authority to deny or approve resting with the provost. After the petition

has received final approval or denial, the student is notified of the decision. Changes in course level, grading or number of credits awarded are not petitionable. UAA courses not on the approved baccalaureate GER lists cannot be petitioned to meet a GER. For more information, see the Academic Petition (p. 25) section.

GER Classification List

Courses listed as satisfying a GER are also identified in the course descriptions (p. 424). A course satisfying a particular GER in the semester in which it was completed will continue to satisfy that GER for that student even if its status has changed in the catalog under which the student graduates.

Students who wish to use a UAF or UAS course to meet a UAA GER should refer to the table of substitutions below.

UAA Table of GER Substitutions

This table is intended to assist UAA students who wish to use UAF or UAS courses to meet a UAA GER per Board of Regents Policy P10.04.062.

Tier I: Basic College - Level Skills

UAA Courses	UAF Courses	UAS Courses
Oral Communication Skills - 3 Credits		
COMM A111, COMM A235, COMM A237, COMM A241	COJO F121X, COJO F131X, COJO F141X	COMM S111, COMM S235, COMM S237, COMM S241
Quantitative Skills - 3 Credits		
MATH A104, MATH A115, MATH A121, MATH A151, MATH A152, MATH A155, MATH A221, MATH A251, MATH A252, MATH A253, STAT A200, STAT A253, STAT A307	MATH F113X, MATH F114X, MATH F122X, MATH F151X, MATH F152X, MATH F156X, MATH F230X, MATH F251X, MATH F252X, MATH F253X, STAT F200X	MATH S113, MATH S151, MATH S152, MATH S251, STAT S107, STAT S200, STAT S273
Written Communication Skills - 6 Credits		
WRTG A111, WRTG A211, WRTG A212, WRTG A213, WRTG A214	WRTG F111X, WRTG F211X, WRTG F212X, WRTG F213X, WRTG F214X	WRTG S111, WRTG S211, WRTG S212

Tier 2: Disciplinary Areas

UAA Courses	UAF Courses	UAS Courses
Fine Arts - 3 Credits		
AKNS A215, AKNS A216, ART A160, DNCE A170, MUS A121, MUS A215, MUS A216, MUS A221, MUS A222, MUS A224, THR A111, THR A214, THR A215	ACNS F223X, ANS F161X, ANS F202X, ANS F223X, ART F200X, ART F261X, ART F262X, COJO F105X, COJO F217X, ENGL F217X, FLPA F105X, FLPA F161X, FLPA F200X, FLPA F215X, FLPA F217X, JRN F105X, JRN F217X, HUM F201X, MUS F103X, MUS F125X, MUS F200X, MUS F223X, NORS F223X	ART S160, ART S261, ART S262, MUS S123, THR S111, THR S211, THR S212

Humanities - 6 Credits Outside the Major

AKNS A101, AKNS A101A, AKNS A101B, AKNS A101C, AKNS A101D, AKNS A101E, AKNS A101F, AKNS A101H, AKNS A102A, AKNS A102B, AKNS A102C, AKNS A102D, AKNS A102E, AKNS A102H, AKNS A201, ART A261, ART A262, ART A360A, ART A360B, ASL A101, ASL A102, ASL A201, ASL A202, CHIN A101, CHIN A102, CHIN A201, CHIN A202, ENGL A121, ENGL A201, ENGL A202, ENGL A301, ENGL A302, ENGL A306, ENGL A307, ENGL A310, ENGL A383, ENGL A445, FREN A101, FREN A102, FREN A201, FREN A202, FREN A301, FREN A302, GER A101, GER A102, GER A201, GER A202, GER A301, GER A302, HIST A101, HIST A102, HIST A121, HIST A122, HIST A131, HIST A132, HIST A341,	ANL F141X, ANL F142X, ANL F251X, ANL F255X, ASLG F101X, ASLG F202X, CHNS F101X, CHNS F102X, COJO F101X, COJO F102X, ENGL F200X, ENGL F270X, FL F200X, FREN F101X, FREN F102X, GER F101X, GER F102X, INU F111X, INU F112X, JPN F101X, JPN F102X, LAT F101X, LAT F102X, LING F101X, LING F216X, PHIL F102X, PHIL F104X, RELG F221X, RUSS F101X, RUSS F102X, SPAN F101X, SPAN F102X, YUP F101X, YUP F102X	AKL S105, AKL S106, AKL S107, AKL S108, ASL S101, ASL S102, ENGL S215, ENGL S223, ENGL S224, ENGL S226, ENGL S261, FREN S101, FREN S102, HIST S105, HIST S106, HIST S131, HIST S132, HUM S120, JOUR S101, PHIL S101, PHIL S201, PHIL S301, RUSS S101, RUSS S102, SPAN S101, SPAN S102	HNRS A192, HUM A211, HUM A212, JPN A101, JPN A102, JPN A201, JPN A202, JPN A301, JPN A302, LING A101, PHIL A101, PHIL A201, PHIL A211, PHIL A212, PHIL A301, PHIL A305, PHIL A313, PHIL A314, PS A331, PS A332, PS A333, RUSS A101, RUSS A102, RUSS A201, RUSS A202, RUSS A301, RUSS A302, SPAN A101, SPAN A102, SPAN A201, SPAN A202, SPAN A301, SPAN A302, THR A411, THR A412

**Natural Sciences -
7 Credits Including
One Laboratory
Course**

Laboratory Courses

ANTH A205,
 ASTR A103 /
 ASTR A103L,
 ASTR A104 /
 ASTR A104L,
 BIOL A102 /
 BIOL A103,
 BIOL A108,
 BIOL A111,
 BIOL A112,
 BIOL A178 /
 BIOL A179,
 CHEM A103 /
 CHEM A103L,
 CHEM A104 /
 CHEM A104L,
 CHEM A105 /
 CHEM A105L,
 CHEM A106 /
 CHEM A106L,
 ENVI A211 /
 ENVI A211L,
 GEOL A111 /
 GEOL A111L,
 GEOL A115 /
 GEOL A115L,
 GEOL A178 /
 GEOL A179,
 GEOL A221,
 LSIS A102,
 LSIS A201,
 LSIS A202,
 PHYS A123 /
 PHYS A123L,
 PHYS A124 /
 PHYS A124L,
 PHYS A211 /
 PHYS A211L,
 PHYS A212 /
 PHYS A212L

Non-laboratory Courses

ATM F101X, BIOL
 F100X, BIOL F103X,
 BIOL F104X, BIOL
 F111X, BIOL F112X,
 BIOL F115X, BIOL
 F116X, BIOL F120X,
 CHEM F100X,
 CHEM F103X,
 CHEM F104X,
 CHEM F105X,
 CHEM F106X, CHEM
 F111X, GEOG F111X,
 GEOS F101X, GEOS
 F106X, GEOS F112X,
 GEOS F120X, MSL
 F111X, PHYS F102X,
 PHYS F103X, PHYS
 F104X, PHYS F115X,
 PHYS F175X, PHYS
 F211X, PHYS F212X,
 PHYS F213X

BIOL S103, BIOL
 S104, BIOL S105,
 BIOL S106, BIOL
 S111, BIOL S112,
 CHEM S103, CHEM
 S105, CHEM S105L,
 CHEM S106, CHEM
 S106L, ENVS S102,
 GEOG S102, GEOL
 S104, PHYS S102,
 PHYS S103, PHYS
 S104, PHYS S211,
 PHYS S212

ASTR A103,
 ASTR A104,
 BIOL A102,
 BIOL A178,
 BIOL A200,
 CHEM A103,
 CHEM A104,
 CHEM A105,
 CHEM A106,
 CPLX A200,
 ENVI A111,
 ENVI A211,
 GEOG A111,
 GEOL A111,
 GEOL A115,
 GEOL A178,
 PHYS A101,
 PHYS A123,
 PHYS A124,
 PHYS A211,
 PHYS A212

ANTH S205, ASTR
 S225, CHEM S100,
 GEOL S105, OCN
 S101, PHIL S206

Social Sciences — 6 Credits Outside the Major and From Two Different Disciplines

ANTH A101, ANTH A200, ANTH A202, ANTH A211, ANTH A250, BA A151, CEL A292, ECON A100, ECON A123, ECON A201, ECON A202, ECON A210, EDEC A105, ENVI A212, GEOG A101, HNRS A292, INTL A101, JPC A204, JUST A110, JUST A251, JUST A330, JUST A375, LEGL A101, LSSS A111, PS A101, PS A102, PS A311, PS A351, PSY A111, PSY A150, PSY A200, SOC A101, SOC A110, SOC A201, SOC A202, SOC A251, SOC A342, SOC A351, SWK A106, SWK A243, URS A121, WS A200	ACCT F261X, ANS F111X, ANS F242X, ANTH F100X, ANTH F101X, ANTH F111X, ANTH F211X, BA F151X, BA F254X, BA AF281X, ECE F104X, ECON F100X, ECON F201X, ECON F202X, ECON F235X, GEOG F101X, HIST F100X, HIST F102X, HIST F122X, HIST F132X, HUMS F125X, JUST F110X, JUST F125X, JUST F251X, PS F100X, PS F101X, PS F201X, PS F221X, PSY F101X, RD F200X, SOC F101X, SOC F201X, SPRT F281X, SWK F103X, WGS F201X	ANTH S101, ANTH S202, ANTH S211, ECON S100, ECON S201, ECON S202, GEOG S101, PS S101, PS S102, PS S202, PS S251, PSY S101, PSY S250, SOC S101, SOC S201

Tier 1: Basic College-Level Skills

The UAA GERs begin with basic college-level skills enhancement in oral communication, quantitative, and written communication skills:

- Courses in oral and written communication develop intellectual and practical skills, building critical reading, thinking, and communication competencies (listening, speaking, reading, and writing) necessary to communicate effectively in a variety of contexts and formats needed for personal and professional success.
- Quantitative courses develop abilities to reason mathematically and analyze quantitative and qualitative data to reach sound conclusions for success in undergraduate study and professional life.
- Baccalaureate students are required to complete the 12 credits of basic college-level skills (oral, written and quantitative) before completing 60 total degree applicable credits. Students may select approved basic college-level skills, which may also fulfill requirements in their intended major. Faculty in English,

communications and mathematics provide placement criteria (which may require the completion of preparatory coursework).

Tier 1 GERs require appropriate placement scores for course registration. Refer to the Course Placement (p. 35) section of this catalog for placement score requirements.

Code	Title	Credits
	Oral Communication Skills	3
	Quantitative Skills	3
	Written Communication Skills	6
	Total Credits	12

Oral Communication Skills

Oral communication skills courses increase the abilities of students to interact appropriately and effectively in a variety of contexts, including interpersonal, small group and public speaking settings.

- Students develop both their message creation and message interpretation skills in order to be more successful communicators.
- Students develop an awareness of the role of communication in a variety of human relationships—personal and professional.
- Students develop and implement effective and appropriate communication skills, including the ability to develop, organize, present and critically evaluate messages.
- Students analyze audiences and adapt to a variety of in-person communication settings.

Courses completed at UAA must be selected from the following Oral Communication courses:

Code	Title	Credits
Select 3 credits of the following:		
COMM A111	Fundamentals of Oral Communication	3
COMM A235	Small Group Communication	3
COMM A237	Interpersonal Communication	3
COMM A241	Public Speaking	3

Quantitative Skills

Quantitative skills courses increase mathematical abilities.

- Students become more adept and competent producers and wiser consumers of the mathematical, statistical and computational analyses which dominate 21st-century decision-making.
- Students develop their algebraic, analytic and numeric skills; use them to solve applied problems; and correctly explain their mathematical reasoning.

Courses completed at UAA must be selected from the following Quantitative Skills courses*:

Code	Title	Credits
Select 3 credits of the following:		
MATH A104	Technical Mathematics	3
MATH A115	Art of Mathematics	3

MATH A121	College Algebra for Managerial and Social Sciences	3
MATH A151	College Algebra for Calculus	4
MATH A152	Trigonometry	3
MATH A155	Precalculus	5
MATH A221	Applied Calculus for Managerial and Social Sciences	3
MATH A251	Calculus I	4
MATH A252	Calculus II	4
MATH A253	Calculus III	4
STAT A200	Elementary Statistics	3
STAT A253	Applied Statistics for the Sciences	4
STAT A307	Probability and Statistics	4

**To determine the appropriate quantitative skills course, students must work with their academic advisor, as degree pathways differ. A minimum grade of C or higher may be required to fulfill prerequisites for the next MATH or STAT course in sequence or a degree requirement.*

Written Communication Skills

Written communication courses emphasize that writing is a recursive and frequently collaborative process of invention, drafting and revising as well as a primary element of active learning in literate cultures.

- Students practice methods for establishing credibility, reasoning critically and appealing to the emotions and values of their audience.
- Students write for a variety of purposes and audiences by employing methods of rhetorical and cultural analysis.
- Students develop the tools to read, think and write analytically about print and nonprint texts and to generate texts that engage their own perceptions while synthesizing the ideas of texts and scholars. Students demonstrate their ability to communicate effectively by selecting form and content that fits the situation; adhering to genre conventions; adapting their voice, tone, and level of formality to that situation; and controlling stylistic features such as sentence variety, syntax, grammar, usage, punctuation and spelling.

Courses completed at UAA must be selected from the following Written Communication courses:

Code	Title	Credits
Select 6 credits of the following:		
WRTG A111	Writing Across Contexts	3
WRTG A211	Writing and the Humanities	3
WRTG A212	Writing and the Professions	3
WRTG A213	Writing and the Sciences	3
WRTG A214	Arguing Across Contexts	3

Tier 2: Disciplinary Areas

Courses in this tier examine Fine Arts, Humanities, Natural Sciences, and Social Sciences which provide a breadth of academic experience

regarding human institutions, artistic and socio-cultural processes, and the physical and natural world.

- Courses in the Fine Arts interpret different systems of aesthetic representation within their historical and cultural contexts.
- Courses in the Humanities investigate the cultural, historical, literary, aesthetic, ethical and spiritual traditions that have shaped and continue to shape our worlds.
- Courses in Natural Sciences identify theoretical and descriptive approaches in which science advances the understanding of the natural and physical world. Lab courses in the Natural Sciences emphasize gathering data and analyzing hypotheses according to the scientific method.
- Courses in the Social Sciences explore the complexity of human behavior via empirical methodologies to better understand interpersonal, institutional, and cultural dynamics.

Code	Title	Credits
	Fine Arts	3
	Humanities	6
	Natural Sciences	7
	Social Sciences	6
Total Credits		22

Fine Arts

The fine arts (i.e. visual and performing) arts focus on the historical, aesthetic, critical and creative approaches to understanding the context and production of art as academic and creative disciplines as opposed to those that emphasize acquisition of skills.

- Students who complete the fine arts requirement should be able to identify and describe works of art by reference to media employed, historical context and style, and structural principles of design and composition.
- Students should be able to interpret the meaning or intent of works of art and assess their stylistic and cultural importance by reference to their historical significance, their relationship to earlier works and artists, and their overall impact of subsequent artistic work.

Courses completed at UAA must be selected from the following Fine Arts courses:

Code	Title	Credits
Select 3 credits of the following:		
AKNS/MUS A215	Music of Alaska Natives and Indigenous Peoples of Northern Regions	3
AKNS/MUS A216	World Indigenous Music	3
ART A160	Art Appreciation	3
DNCE A170	Dance Appreciation	3
MUS A121	Music Appreciation	3
MUS A221	History of Western Art Music I	3
MUS A222	History of Western Art Music II	3
MUS A224	History of Jazz	3

THR A111	Theatre Appreciation	3
THR A214	Historical Plays	3
THR A215	Contemporary Plays	3

Humanities

(6 credits from outside the major)

The humanities courses examine the characteristics of realities, the purpose of human existence, the properties of knowledge and the qualities of sound reasoning, eloquent communication, and creative expression, studying the problems of judicious conduct in personal, social and political life. They also consider the qualities of the divine, the sacred and the mysterious. In these tasks the humanities courses reflect upon the world's heritage of the arts, history, languages, literature, religion and philosophy.

- Students who complete a content-oriented course in the humanities should be able to identify texts or objects, place them in the historical context of the discipline, articulate the central problems they address and provide reasoned assessments of their significance.
- Students who complete a skills-oriented humanities course in logic should be able to identify the premises and conclusions of written arguments, evaluate their cogency, and recognize common fallacies. They should also be able to employ formal techniques to determine the validity of deductive arguments and evaluate the adequacy of evidence according to appropriate inductive standards.
- Students who complete a humanities course in a language should additionally demonstrate proficiency in listening, speaking, reading, and writing in the target language.

Courses completed at UAA must be selected from the following Humanities courses:

Code	Title	Credits
Select 6 credits from the following:		
AKNS A101	Alaska Native Languages I	4
AKNS A101A	Elementary Central Yup'ik Language I	4
AKNS A101B	Elementary Tlingit Language I	4
AKNS A101C	Elementary Alaska Native Language I	4
AKNS A101D	Elementary Inupiaq Language I	4
AKNS A101E	Elementary Alutiiq Language I	4
AKNS A101F	Elementary Dena'ina Language	4
AKNS A101H	Elementary Ahtna Language I	4
AKNS A102A	Elementary Central Yup'ik Language II	4
AKNS A102B	Elementary Tlingit Language II	4
AKNS A102C	Elementary Alaska Native Language II	4
AKNS A102D	Elementary Inupiaq Language II	4
AKNS A102E	Elementary Alutiiq Language II	4
AKNS A102H	Elementary Ahtna Language II	4
AKNS A201	Alaska Native Perspectives	3

ART A261	History of Western Art I	3
ART A262	History of Western Art II	3
ART A360A	History of Non-Western Art I	3
ART A360B	History of Non-Western Art II	3
ASL A101	Elementary American Sign Language I	4
ASL A102	Elementary American Sign Language II	4
ASL A201	Intermediate American Sign Language I	4
ASL A202	Intermediate American Sign Language II	4
CHIN A101	Elementary Chinese I	4
CHIN A102	Elementary Chinese II	4
CHIN A201	Intermediate Chinese I	4
CHIN A202	Intermediate Chinese II	4
ENGL A121	Introduction to Literature	3
ENGL A201	Masterpieces of World Literature I	3
ENGL A202	Masterpieces of World Literature II	3
ENGL A301	Literature of Britain I	3
ENGL A302	Literature of Britain II	3
ENGL A306	Literature of the United States I	3
ENGL A307	Literature of the United States II	3
ENGL A310	Ancient Literature	3
ENGL A383	Film Interpretation	3
ENGL A445	Alaska Native Literatures	3
FREN A101	Elementary French I	4
FREN A102	Elementary French II	4
FREN A201	Intermediate French I	4
FREN A202	Intermediate French II	4
FREN A301	Advanced French I	4
FREN A302	Advanced French II	4
GER A101	Elementary German I	4
GER A102	Elementary German II	4
GER A201	Intermediate German I	4
GER A202	Intermediate German II	4
GER A301	Advanced German I	4
GER A302	Advanced German II	4
HIST A101	Western Civilization I	3
HIST A102	Western Civilization II	3
HIST A121	East Asian Civilization I	3
HIST A122	East Asian Civilization II	3
HIST A131	History of the United States I	3
HIST A132	History of the United States II	3
HIST A341	History of Alaska	3
HNRS A192	Honors Seminar: Enduring Books	3
HUM A211	Introduction to Humanities I	3
HUM A212	Introduction to Humanities II	3
JPN A101	Elementary Japanese I	4

JPN A102	Elementary Japanese II	4
JPN A201	Intermediate Japanese I	4
JPN A202	Intermediate Japanese II	4
JPN A301	Advanced Japanese I	4
JPN A302	Advanced Japanese II	4
LING A101	How Language Works	3
PHIL A101	Introduction to Logic	3
PHIL A201	Introduction to Philosophy	3
PHIL A211	Ancient and Medieval Philosophy	3
PHIL A212	Early Modern Philosophy	3
PHIL A301	Ethics	3
PHIL A305	Professional Ethics	3
PHIL A313	Eastern Philosophy and Religion	3
PHIL A314	Western Religions	3
PS A331	Political Philosophy	3
PS A332	History of Political Philosophy I: Classical	3
PS A333	History of Political Philosophy II: Modern	3
RUSS A101	Elementary Russian I	4
RUSS A102	Elementary Russian II	4
RUSS A201	Intermediate Russian I	4
RUSS A202	Intermediate Russian II	4
RUSS A301	Advanced Russian I	4
RUSS A302	Advanced Russian II	4
SPAN A101	Elementary Spanish I	4
SPAN A102	Elementary Spanish II	4
SPAN A201	Intermediate Spanish I	4
SPAN A202	Intermediate Spanish II	4
SPAN A301	Advanced Spanish I	4
SPAN A302	Advanced Spanish II	4
THR A411	History of Theatre to 1700	3
THR A412	History of Theatre Since 1700	3

Natural Sciences

(must include a laboratory course)

The natural sciences focus on gaining an understanding of the matter, events and processes that form and sustain our universe. Methods of scientific inquiry are diverse, but all aim to formulate general principles that explain observations and predict future events or behaviors within their disciplines.

- Students completing their natural sciences requirement will be able to apply the scientific method by formulating questions or problems, proposing hypothetical answers or solutions, testing those hypotheses, and reaching supportable conclusions.
- Students demonstrate an understanding of the fundamentals of one or more scientific disciplines, a knowledge of the discoveries and advances made within that discipline, and the impact of scientific

information in sculpting thought and in providing the foundations for the technology in use at various times in history.

Laboratory courses illustrate how scientists develop, test and challenge scientific theories, providing an appreciation for the process and problems involved in the advancement of scientific knowledge.

- Students will demonstrate the ability to work with the tools and in the settings encountered by professionals in the discipline.
- Students will critically observe materials, events or processes, and accurately record and analyze their observations.

Courses completed at UAA must be selected from the following Natural Sciences courses:

Code	Title	Credits
Select 7 credits of the following: (must include a laboratory course)		
ANTH A205	Biological Anthropology	4
ASTR A103 & A103L	Solar System Astronomy and Solar System Astronomy Laboratory	4
ASTR A104 & A104L	Stars, Galaxies and Cosmology and Stars, Galaxies and Cosmology Laboratory	4
BIOL A102 & BIOL A103	Introductory Biology and Introductory Biology Laboratory	4
BIOL A108	Principles and Methods in Biology	6
BIOL A111	Human Anatomy and Physiology I	4
BIOL A112	Human Anatomy and Physiology II	4
BIOL/GEOL A178	Fundamentals of Oceanography	3
BIOL/GEOL A179	Fundamentals of Oceanography Laboratory	1
BIOL/CPLX A200	Introduction to Complexity	3
CHEM A103 & A103L	Introduction to General Chemistry and Introduction to General Chemistry Laboratory	4
CHEM A104 & A104L	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Laboratory	4
CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	4
CHEM A106 & A106L	General Chemistry II and General Chemistry II Laboratory	4
ENVI A211 & A211L	Environmental Science: Systems and Processes and Environmental Science: Systems and Processes Laboratory *	4
GEOG/ENVI A111	Earth Systems: Elements of Physical Geography *	3

GEOL A111 & A111L	Physical Geology and Physical Geology Laboratory	4
GEOL A115 & A115L	Environmental Geology and Environmental Geology Laboratory	4
GEOL A221	Historical Geology	4
LSIS A102	Origins: Earth-Solar System-Life	5
LSIS A201	Life on Earth	5
LSIS A202	Concepts and Processes: Natural Sciences	5
PHYS A101	Physics for Poets	3
PHYS A123 & A123L	Basic Physics I and Basic Physics I Laboratory	4
PHYS A124 & A124L	Basic Physics II and Basic Physics II Laboratory	4
PHYS A211 & A211L	General Physics I and General Physics I Laboratory	4
PHYS A212 & A212L	General Physics II and General Physics II Laboratory	4

* *Equivalent courses are treated as repeats. Only the credits and chronologically last grade earned are applied toward graduation requirements, prerequisite fulfillment and cumulative UAA GPA calculation. Only the most recent course taken is used to fulfill university requirements, including the General Education Requirement.*

Social Sciences

(6 credits from outside the major and from two different disciplines)

The social sciences constitute the various fields of study concerned with society, social interaction and human behavior. Each of the specific disciplines in the social sciences is a historically recognized area of inquiry with a scientifically grounded methodology, yet they all share the goal of understanding society, its institutions, and its people and their behavior.

- Students describe the discipline studied and discuss the key principles or themes that unify it.
- Students describe and contrast key scientific theories and theoretical approaches in a discipline and the ways in which these theories structure social scientists' thinking and research
- Students demonstrate the ability to think critically about how society works and how social realities are created by diverse social processes and cultural practices.
- Students describe the wide range of social science data and the importance of using empiricism, both qualitative and quantitative, in making claims about the social world and in setting evidence-based social policy.
- Students explain and use basic social science methods and summarize the assumptions behind and the limitations of inductive or deductive approaches that might include the formulation of research questions and hypotheses; data collection and analysis; and testing, verifying and rejecting hypotheses.

Courses completed at UAA must be selected from the following Social Sciences courses:

Code	Title	Credits
Select 6 credits of the following:		
ANTH A101	Introduction to Anthropology	3
ANTH A200	Alaska Native Cultures	3
ANTH A202	Cultural Anthropology	3
ANTH A211	Archaeology	4
ANTH A250	The Rise of Civilization	3
BA A151	Business Foundations	3
CEL A292	Introduction to Civic Engagement	3
ECON A100	Political Economy	3
ECON A123	Introduction to Behavioral Economics	3
ECON A201	Principles of Macroeconomics	3
ECON A202	Principles of Microeconomics	3
ECON A210	Environmental Economics and Policy	3
EDEC A105	Introduction to the Field of Early Childhood Education	3
ENVI A212	Living on Earth: Introduction to Environmental Studies	3
GEOG/INTL A101	Local Places/Global Regions: An Introduction to Geography	3
HNRS A292	Honors Seminar in Social Science	3
JPC A204	Media Literacy	3
JUST A110	Introduction to Justice	3
JUST/SOC A251	Crime and Delinquency	3
JUST A330	Justice and Society	3
JUST A375	Juvenile Justice and Delinquency	3
LEGL A101	Introduction to Law	3
LSSS A111	Cultural Foundations of Human Behavior	3
PS A101	Introduction to American Government	3
PS A102	Introduction to Political Science	3
PS A311	Comparative Politics	3
PS/SOC A351	Political Sociology	3
PSY A111	Introduction to Psychology	3
PSY A150	Lifespan Development	3
PSY A200	Introduction to Behavior Analysis	3
SOC A101	Introduction to Sociology	3
SOC A110	Introduction to Gerontology: Multidisciplinary Approach	3
SOC A201	Social Problems and Solutions	3
SOC A202	Social Institutions	3
SOC A342	Marriages and Families	3
SWK A106	Introduction to Social Welfare	3

SWK A243	Cultural Diversity and Community Service Learning	3
URS A121	Methods of Inquiry	3
WS A200	Introduction to Women's and Gender Studies	3

The Alaska Native-Themed GER addresses UAA's mission to serve 'the higher education needs of the state, its communities, and its diverse peoples'. It also recognizes UAA's unique location on the ancestral homelands of the Dena'ina Athabascan, Ahtna Athabascan, Alutiiq/Sugpiak, and Eyak peoples, and the 20 Alaska Native languages that are now official languages of the State of Alaska.

Students are required to complete a minimum of three credits of Alaska Native-Themed GER coursework from the following list to graduate with an Associate of Arts or a baccalaureate degree.

Code	Title	Credits
AKNS A101A	Elementary Central Yup'ik Language I	4
AKNS A101B	Elementary Tlingit Language I	4
AKNS A101C	Elementary Alaska Native Language I	4
AKNS A101D	Elementary Inupiaq Language I	4
AKNS A101E	Elementary Alutiiq Language I	4
AKNS A101F	Elementary Dena'ina Language	4
AKNS A101H	Elementary Ahtna Language I	4
AKNS A102A	Elementary Central Yup'ik Language II	4
AKNS A102B	Elementary Tlingit Language II	4
AKNS A102C	Elementary Alaska Native Language II	4
AKNS A102D	Elementary Inupiaq Language II	4
AKNS A102E	Elementary Alutiiq Language II	4
AKNS A109B	Tlingit Orthography	4
AKNS A109C	Alaska Native Language Orthography	4
AKNS A109D	Alutiiq Orthography	4
AKNS A181	Community Project Planning	1
AKNS A182	Grant Writing for Alaska Native Communities	1
AKNS A184	Indigenous Leadership and Civic Engagement	1
AKNS A185	Event Planning and Meeting Facilitation	1
AKNS A201	Alaska Native Perspectives	3
AKNS A230	Oral Traditions of Alaska Native People	3
AKNS A290	Topics in Alaska Native Studies	1-3
AKNS A292A	Alaska Native Language Apprenticeship	1-3
AKNS A292B	Alaska Native Language Conversational Fluency Intensive	1-3

AKNS/PS A313	Tribes, Nations and Peoples	3
AKNS A346	Alaska Native Politics	3
AKNS A356	Yup'ik Music and Dance Ensemble	2
AKNS A357	Inupiaq Music and Dance Ensemble	2
AKNS A461	Decolonizing Methodologies	3
AKNS A490	Advanced Topics in Alaska Native Studies	1-3
AKNS A492	Cultural Knowledge of Native Elders	3
ANTH A200	Alaska Native Cultures	3
ANTH A390A	Arctic and Subarctic Cultures	3
ANTH A461	Decolonizing Methodologies	3
ANTH A490D	Topics in the Contemporary North	3
ART A370	Intermediate Alaska Native Art	3
ART A470	Advanced Alaska Native Art	3
BA A290A	Alaska Native Business Practices	1-3
BA A401	Alaska Native Corporation Business Management	3
BA A402	Indigenous Leadership	3
BA A403	Inside the Boardroom of Alaska Native Organizations	1
BA A490B	Selected Topics in Alaska Native Corporations	1-3
DN A155	Survey of Alaska Native Nutrition	3
EDFN A478	Issues in Alaska Native Education, K-12	3
ENGL A444	Topics in Native Literatures	3
ENGL A445	Alaska Native Literatures	3
HIST A341	History of Alaska	3
HIST A346	History of Native Peoples of United States and Canada	3
JUST A355	Rural Justice	3
JUST A485	Tribal Courts and Alaska Native Rights	3
MUS/AKNS A215	Music of Alaska Natives and Indigenous Peoples of Northern Regions	3
MUS/AKNS A216	World Indigenous Music	3
MUS/AKNS A218A	Alaska Native Drummaking Techniques: Athabascan and Southeast style	3
MUS/AKNS A218B	Alaska Native Drummaking Techniques: Inupiaq and Yup'ik Style	3
MUS A356	Yup'ik Music and Dance Ensemble	2
MUS A357	Inupiaq Music and Dance Ensemble	2
NS A423	Transcultural Nursing	3
NS A430	Rural Health Care	3
PS A345	Alaska Government and Politics	3

PS A346	Alaska Native Politics	3
PSY A465	Cross-Cultural Psychology	3
SWK A243	Cultural Diversity and Community Service Learning	3

Tier 3: Integrative Capstone

Integrative Capstone courses culminate the GER experience by synthesizing material across GER domains with the blending of basic college-level skills (Tier 1) and/or disciplinary areas (Tier 2), establishing a foundation for life-long learning.

- Students completing the integrative capstone requirement demonstrate the ability to integrate knowledge and employ skills to synthesize creative thinking, critical judgment and personal experience in a meaningful and coherent manner.
- Student adopt critical perspectives for understanding the forces of globalization and diversity.

The 37-credit General Education Requirement, including the 3-credit integrative capstone, is required for graduation after September 2008 for baccalaureate students who were admitted to major or pre-major status under the 2005-2006 UAA Catalog or later catalogs. (For specifics on catalog year requirements, see Academic Standards and Regulations (p. 25).)

Courses completed at UAA must be selected from the following Integrative Capstone courses:

Code	Title	Credits
Select 3 credits from the following:		
ACCT A452	Auditing	3
ANTH A452	Culture and Human Biodiversity	3
ANTH A454	Culture and Ecology	3
ANTH A455	Culture and Health	3
ANTH A464	Culture and Globalization	3
ART A491	Senior Seminar	3
ASTR/BIOL A365	Astrobiology	3
ATA A492	Air Transportation System Seminar	3
BIOL A452	Human Genome	3
BIOL/CHEM/PHYS A456	Nonlinear Dynamics and Chaos	3
BIOL A473	Conservation Biology	3
BIOL A481	Marine Biology	3
BIOL A489	Population Genetics and Evolutionary Processes	3
CA A495	Hospitality Internship	6
CE A438	Design of Civil Engineering Systems	3
CEL A450	Civic Engagement Leadership Capstone	3
CHEM A441	Principles of Biochemistry I	3
CIS A376	Management Information Systems	3

CM A422	Sustainability in the Built Environment	3
CM A450	Construction Management Professional Practice	3
CSCE A470	Computer Science and Engineering Capstone Project	3
DH A424	Community Dental Health II	3
DN A415	Community Nutrition	3
DNCE A370	Interdisciplinary Dance Studies: Issues and Methods	3
ECON A492	Seminar in Economic Research	3
EDFN A300	Philosophical and Social Context of American Education	3
EDFN A304	Comparative Education	3
EE A438	Design of Electrical Engineering Systems	3
ENGL A434	Rhetoric and Composition Research Theories and Methodologies	3
ENGL A476	History of English Language	3
ENGL A478	Public Science Writing	3
ENVI A470	Environmental Planning and Problem Solving	4
GEO A460	Geomatics Capstone Project	3
GEOG A390A	Topics in Global Geography	3
GEOG A390B	Topics in Regional Geography	3
GEOL A361	Earth Resources and Society	3
GEOL A456	Geoarchaeology	3
GEOL A468	Geomicrobiology	3
HIST/INTL/PS A325	Northeast Asia in 21st Century	3
HIST A390	Themes in World History	3
HIST/RUSS A427	Post-Soviet Culture and Society	3
HS A491	Health Issues in Alaska	3
HS A492	Senior Seminar: Contemporary Health Policy	3
HUMS A496	Human Services Integrative Capstone	3
JPC A403	Communications and Media Research	3
JPC A492	JPC Capstone Seminar	3
JUST A432	Crime Analysis and Mapping	3
JUST/LEGL A443	Civil Liberties	3
JUST A460	Justice in Crisis	3
JUST A463	Biobehavioral Criminology	3
JUST/LEGL A485	Tribal Courts and Alaska Native Rights	3
LEGL A449	Jurisprudence and Legal Theory	3
LSIC A488A	Capstone Project I: Design and Research	3
MATH A420	Historical Mathematics	3

MBIO A468	Geomicrobiology	3
ME A438	Design of Mechanical Engineering Systems	3
MEDT A302	Clinical Laboratory Education and Management	4
MUS A331	Form and Analysis	3
NS A411	Population Health Integrative Capstone	3
OSH A460	Economic Value of Safety	3
PEP A384	Cultural and Psychological Aspects of Health and Physical Activity	3
PHIL A400	Ethics, Community, and Society	3
PS A492	Senior Seminar in Politics	3
PSY A370	Behavioral Neuroscience	3
SOC A488	Capstone Seminar	3
STAT A308	Intermediate Statistics for the Sciences	3
SWK A406	Social Welfare: Policies and Issues	3
TECH A453	Capstone Project	3
THR A492	Senior Seminar	3

Post-Baccalaureate Certificates

General University Requirements (GURs)

University requirements for all post-baccalaureate certificates are as follows:

1. The student must complete at least 24 approved semester credits earned after the posting of their previous degree.
2. The student must complete all requirements established by the program.
3. Courses at the 500-level are for professional development and are not applicable toward any certificate, even by petition.
4. At all course levels, a grade of C is minimally acceptable.
5. At least two-thirds of the credits required for the certificate must be taken at the upper division (300-400) or graduate (600) level.
6. Up to one-third of the semester credits earned after the posting of their previous degree may be transferred to UAA from a regionally accredited institution and counted toward a post-baccalaureate certificate. Quarter credits are converted to semester credits by multiplying quarter credits by two-thirds. Acceptance of transfer credit toward program requirements is at the discretion of the individual program.
7. Individual college deans or designees may allow credit earned at other universities in the UA system, excluding credit used toward another degree or certificate, to be transferred to UAA, as long as at least 9 credits applicable to the student's certificate program are earned at UAA after acceptance into the program.
8. Courses taken through credit by examination or graded credit/no credit (CR/NC) do not count toward certificate requirements. They may, however, be used to satisfy prerequisites or to establish competency in a subject, thus allowing the advisor or committee to

waive certain courses in an established program, as long as the total credits in the certificate program remain the same.

9. If the requirements for a post-baccalaureate certificate are not met within seven years of formal acceptance into the program, admission expires and the student must reapply for admission and meet the admission requirements in effect at the time of readmission or graduation (see Catalog Year (p. 29) in Academic Standards and Regulations).
10. All credits counted toward the post-baccalaureate certificate, including transfer credits, must be earned within the consecutive seven-year period prior to graduation.

Post-Baccalaureate Policies

Additional Certificates

Students who have received a post-baccalaureate certificate from a regionally accredited college or university may earn another post-baccalaureate certificate by completing at least 16 resident credits after the awarding of the previous certificate. The student must meet all General University Requirements for Post-Baccalaureate Certificates (p. 97), and college and program requirements. Fulfilling all university, college and program requirements may require more than the minimum 16 additional resident credits. If the 16 additional credits and other requirements have been earned for each additional post-baccalaureate certificate, two or more post-baccalaureate certificates may be awarded simultaneously.

Catalog Year for Post-Baccalaureate Certificate Programs

Each student's year of acceptance is established when the student is formally admitted into the certificate program. A student's year of acceptance is adjusted if the student formally postpones admission, executes a change of certificate or reapplies after formal admission expires (see below).

Students may elect to graduate under the requirements of any catalog in effect during the seven years after formal acceptance to the program.

If the requirements for a certificate are not met within seven years of formal acceptance into the program, admission expires and the student must reapply for admission.

All credits counted toward the certificate, including transfer credit, must be earned within the consecutive seven-year period prior to graduation.

Change of Certificate

Students who wish to change certificate programs must formally apply for admission to the new certificate program through the Office of Admissions and pay the appropriate fee. This applies both to changes between colleges and to different certificates within the same college. Students will be expected to meet all admission and program requirements of the new major or emphasis area.

Concurrent Certificates

Students may pursue concurrent post-baccalaureate certificates as long as they have formally applied and been accepted to each program through the Office of Admissions.

Formal Acceptance to Post-Baccalaureate Certificate Programs

Once all required admission documents have been received by the Office of Admissions, the student's admission packet is forwarded to the dean or designee of the specific program. The acceptance decision is made by the dean or designee, who informs the Office of Admissions of the decision. The Office of Admissions sends the official Certificate of Admission directly to the applicant. Acceptance to a certificate program does not guarantee later admission to other certificate or degree programs.

Full-Time/Part-Time Status for Post-Baccalaureate Certificate-Seeking Students

A student who has been admitted to a UAA post-baccalaureate certificate program and is enrolled at UAA for 12 or more credits is classified as full-time. Courses count toward full-time status only if they are applicable to the certificate program. A post-baccalaureate certificate student enrolled at UAA for fewer than 12 credits is classified as part-time.

Audited courses, continuing education units (CEUs) and continuous registration are not included in the computation of the student's full-time or part-time status.

Good Standing for Post-Baccalaureate Certificate-Seeking Students

Post-baccalaureate certificate-seeking students who maintain a 2.0 (C) cumulative GPA in courses on their official certificate studies plan are considered in good standing.

Non-Degree-Seeking Students

Non-degree-seeking students who wish to register for courses may be required to obtain the signature of the department chair or faculty member. Registration as a non-degree-seeking student implies no commitment by the university to the student's later admission to a post-baccalaureate certificate program. Up to one-third of the credits of post-baccalaureate certificate coursework may be completed in the student's program before program admission. Non-degree-seeking students do not qualify for federal or state financial aid benefits nor do they qualify to receive a Form I-20 Certificate of Eligibility for Nonimmigrant (F-1) Student Status. (See Admissions (p. 49) for further information.)

Post-Baccalaureate Certificate Advisor

The dean or designee of the appropriate college offering the post-baccalaureate certificate program appoints an advisor for each student accepted to the program.

Responsibilities of the Post-Baccalaureate Certificate Advisor/Committee

The division of responsibility between the advisor and/or committee is determined at the program level. The advisor and/or committee will do the following:

1. Review the student's certificate studies plan, ensuring that it includes the post-baccalaureate certificate university requirements, all courses required for the certificate and any special program requirements.
2. Identify deficiencies in the student's admission or academic background and assist student in developing remedies.
3. Approve the official certificate studies plan.
4. Monitor the student's progress and timely completion of all requirements.
5. Monitor the timely submission of the official certificate studies plan and other documents to the Office of the Registrar.
6. Review and approve any changes to the official certificate studies plan, directing timely submission of the revised plan to the Office of the Registrar.
7. Review and approve any required capstone experience or project according to procedures established by the individual program.
8. Administer and assess a comprehensive examination, if required.

Reinstatement to Post-Baccalaureate Certificate-Seeking Status

Students who have been removed from post-baccalaureate certificate-seeking status for failing to maintain good standing must reapply for a post-baccalaureate certificate program and pay the appropriate fee.

Removal From Post-Baccalaureate Certificate-Seeking Status

A student's academic status may be changed to non-degree-seeking if the requirements to remove provisional admission or if minimum academic standards are not met.

A student who fails to maintain good standing in courses applicable to his/her certificate program, for reasons specified in writing, is not making satisfactory progress toward completing the program requirements and may be removed from certificate-seeking status. Each college has procedures to deal with appeals arising from removal from certificate-seeking status.

Transfer Credits

Up to one-third of the credits required for a post-baccalaureate certificate may be transferred into UAA and applied to that certificate from a regionally accredited institution if they were not previously used to obtain any other degree or certificate. Acceptance of transfer credits toward program requirements is at the discretion of the individual program.

College of Arts and Sciences

The College of Arts and Sciences is dedicated to the principle that an enlightened understanding of the world is fostered by study of the physical environment, cultural values and processes, creative

expressions, and systems of thought and discovery. In fulfillment of this educational commitment, the fields of study offered by the college serve two ends: they are intellectually valuable in themselves and they are an essential complement to other fields of knowledge.

The College of Arts and Sciences offers degrees in arts, humanities, natural sciences, and social sciences, ranging from the associate of arts to baccalaureate and graduate degrees. Students seeking associate or baccalaureate degrees must complete General University Requirements, General Education Requirements, and major program requirements. Students should examine program descriptions and consult an adviser before making final course selections. Some courses may be applied to satisfy more than one requirement; for example at the baccalaureate level a course may fulfill both a general education requirement and a major program requirement.

The School of Education, housed with the College of Arts and Sciences, offers multiple programs leading to initial teacher licensure and associate and baccalaureate degree programs. See the School of Education (p. 185) section of the catalog and the School of Education website (<https://www.uaa.alaska.edu/academics/school-of-education>) for more information.

High School Preparation

The following high school courses are recommended but not necessarily required in preparation for admission to the various programs within the College of Arts and Sciences:

Code	Title	Credits
Arts	1-2 years	
	Emphasis upon fundamental courses in the arts.	
Computer Science	1-2 years	
	Basic knowledge of computer science recommended for all college-bound students.	
English	4 years	
	Emphasis on spelling, writing, grammar, and research skills, such as preparation of bibliographies.	
Language	1-2 years	
	Suggested languages: German, Russian, Latin, Japanese, French, Spanish, Chinese or Native languages.	
Mathematics	3-4 years	
	BA candidates: 3 years with emphasis on algebra I and II, trigonometry, geometry, analysis.	
	BS candidates: 4 years with emphasis on algebra I and II, trigonometry, geometry, analysis.	
Science	2-4 years	
	BA candidates: 2-3 years with emphasis in biology, chemistry, physics, geology and/or earth science.	
	BS candidates: 3-4 years with emphasis in biology, chemistry, physics, geology and/or earth science.	
Social Sciences	2 years	
	Emphasis in world history, U.S. history, political theory, current events, geography, anthropology or archaeology.	

Student Learning Outcomes: Baccalaureate Degrees

Bachelor of Arts

In addition to discipline-specific knowledge and methodologies, students graduating with a Bachelor of Arts degree in the College of Arts and Sciences will demonstrate:

- An ability to formulate and evaluate arguments based upon evidence;
- An ability to analyze the context and significance of events, concepts, texts, and actions;
- An understanding of cultural differences and similarities and the complexities of intercultural relations;
- A knowledge of scientific approaches to the study of individuals, groups, and systems;
- An application of the creative processes through direct participation in or study of the arts.

Bachelor of Science

In addition to discipline-specific quantitative and scientific methods, students graduating with a Bachelor of Science degree in the College of Arts and Sciences will demonstrate:

- An ability to engage in, analyze, and communicate results of scientific inquiry;
- An ability to critically reflect on the nature and process of science;
- An understanding of the ethical standards of science, consistent with one's academic discipline and professional, social, and cultural contexts;
- An application of scientific skills and knowledge to address problem-oriented questions through authentic research experience or through a community-engaged internship or practicum.

Electives

No more than 6 credits in lower-division Physical Education Professional (PEP) and/or Physical Education and Recreation (PER) courses may be applied toward a BA or BS degree offered by the College of Arts and Sciences.

Bachelor of Fine Arts in Art

The Bachelor of Fine Arts (BFA) in Art is a selective program. Admission requires acceptance by both the University and the Department of Art BFA Committee.

Bachelor of Music

The Bachelor of Music requires proficiency in performance. Advancement in the program requires evidence of musicianship and performance ability as determined by juried evaluation.

Bachelor of Liberal Studies

Admissions to the Bachelor of Liberal Studies degree have been suspended

Minors

A minor from the College of Arts and Sciences consists of a minimum of 18 credits, at least 6 of which must be at the upper-division level. Refer to each discipline for specific courses required. Also see university policy governing Minors.

Associate of Arts

The Associate of Arts (AA) degree provides a strong foundation in quantitative reasoning, written and oral communication, natural and social sciences, humanities and fine arts. The AA prepares students for career advancement or transition to a baccalaureate program. Students may complete the AA as a stand-alone degree or as preparation for a subsequent baccalaureate degree. A student who graduates with the AA has completed all general education requirements for a baccalaureate degree except for an integrative capstone course (an upper-division course usually taken later in a student's baccalaureate program). Early completion of general education requirements provides opportunities for students to strengthen basic intellectual skills, increase their knowledge of traditional academic disciplines and meet prerequisites for upper-division courses. AA students can pursue general studies or, with the assistance of an academic adviser, tailor the AA program to prepare for a particular baccalaureate major.

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degrees (p. 53).

Advising

Students pursuing an Associate of Arts degree are required to consult with an adviser prior to registering. Advisers will assist students in tailoring the Associate of Arts (AA) program plan to meet individual objectives and prepare for selected baccalaureate programs. Advisers will guide students in planning semester schedules that complete AA requirements as efficiently as possible. The AA degree can be completed entirely online, entirely face-to-face or by a combination of different modes of delivery.

Graduation Requirements

1. Satisfy the General University Requirements for the Associate of Arts Degree (p. 85).
2. Complete requirements for the Associate of Arts (AA).

Requirements for the Associate of Arts degree

A total of 60 credits is required for the Associate of Arts (AA) degree. Students who are interested in the AA alone have a wide range of choices to meet degree requirements. Requirements in basic skills and in disciplinary areas may be met by selecting any course in the

appropriate category from the list of General Education courses (GERs) (p. 86). In addition, students complete 26 credits of electives.

AA students who wish to go on to a baccalaureate degree after completing the AA are advised to meet AA requirements with courses that can be applied flexibly either to the AA or to baccalaureate degree requirements. AA students who wish to prepare for a specific baccalaureate major should consult an adviser for recommended courses.

- Complete 3 credits from the GER Oral Communication Skills list (p. 90).
- Complete 6 credits from the GER Written Communication list (p. 90).
- Complete 3 credits from the GER Quantitative Skills list (p. 90).
- Complete 3 credits from the GER Fine Arts list (p. 91).
- Complete 6 credits from the GER Humanities list (p. 91).
- Complete 6 credits from the GER Social Sciences list (p. 91) (must be in two different disciplines).
- Complete 7 credits including one laboratory course (either combined or separate) from the GER Natural Sciences list (p. 91).
- Complete 26 credits of electives

Mission Statement

The Associate of Arts (AA) degree provides an academic foundation for student success in multiple pathways including continued study, career preparation, and engaged citizenship for Alaska's diverse peoples.

Program Student Learning Outcomes

Students graduating with an AA degree from UAA will be able to do the following at the introductory level:

- communicate effectively
- think critically
- evaluate analytically
- reason empirically

Alaska Native Studies

Social Sciences Building (SSB), Room 378, (907) 786-6135
www.uaa.alaska.edu/native (<http://www.uaa.alaska.edu/native>)

The Alaska Native studies program provides the student with an introduction to Alaska Native and indigenous ways of knowing and seeing the world. The program emphasizes Alaska Native languages, cultures, politics and art, and provides an in-depth perspective on traditional and contemporary Native society. Students may select one of two areas to complete the requirements for the minor: a policy focus or a language focus. Both of these areas emphasize the dynamic nature of Alaska Native cultures. The Alaska Native Studies Minor provides valuable enrichment to any UAA baccalaureate degree.

Programs of Study

Occupational Endorsement Certificate

- OEC in Alutiiq Language (p. 101)

Minor

- Minor in Alaska Native Studies (p. 101)

Faculty

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Marie Meade, Master Yup'ik Language instructor mmeade@alaska.edu

Occupational Endorsement Certificate in Alutiiq Language

This program is delivered only through Kodiak College.

Students can earn an Occupational Endorsement Certificate in Alutiiq Language (also known as Sugpiaq) on their transcript through Kodiak College. The transcribed certificate is available to any student who receives grades of C or higher in the series of courses. Attainment of the OEC in Alutiiq Language will provide knowledge, resources and skills appropriate for a variety of entry-level jobs that use the Alutiiq language. Taken together, the courses introduce students to conversational speech and basic Alutiiq writing, reading and grammar, as well as contextual information about Alaskan language relationships, language endangerment and language revitalization. Students who earn this OEC will be able to certify a level of intermediate speech ability according to the American Council on the Teaching of Foreign Languages (ACTFL) scale through completion of an oral proficiency assessment. The style of Alutiiq taught in this program is Kodiak Island Alutiiq.

Admission Requirements

Satisfy the Application and Admission Requirements for Occupational Endorsement Certificates (p. 53).

Advising

Advising for this program is available from the Kodiak College Alaska Native Studies faculty at (907) 486-1276.

Graduation Requirements

- Satisfy the General University Requirements for Occupational Endorsement Certificates (p. 82).
- Complete the program requirements below with a grade of C or better.

Program Requirements

Code	Title	Credits
AKNS A101E	Elementary Alutiiq Language I	4
AKNS A102E	Elementary Alutiiq Language II	4
AKNS A109D	Alutiiq Orthography	4
AKNS A292B	Alaska Native Language Conversational Fluency Intensive *	1
Choose one of the following:		3
AKNS A240	Alaska Native Cultural Orientation - Alutiiq/Sugpiaq	
AKNS A292A	Alaska Native Language Apprenticeship	
Total Credits		16

* Completion of AKNS A292B with a grade of C or higher requires a minimum of intermediate-level conversational proficiency, based on the ACTFL oral proficiency assessment conducted at the conclusion of the course. Students who do not attain intermediate speaking ability may retake the course until successful.

A total of 16 credits is required for the certificate.

Program Student Learning Outcomes

Upon completion of this OEC, students will be prepared to

- Demonstrate intermediate speaking proficiency, with conversational speaking skills as described in the ACTFL 2012 proficiency standards.
- Read and comprehend basic Alutiiq, including words and sentences pertaining to everyday topics, at level comparable to their speaking proficiency.
- Define and identify measures of language endangerment, describe Alaska Native language relationships, and compare theories of second language acquisition for threatened languages.
- Locate and assess Alutiiq language resources and reference materials for diverse situations and proficiency levels.

Minor in Alaska Native Studies

Code	Title	Credits
Core Courses		
AKNS A201	Alaska Native Perspectives	3
AKNS A492	Cultural Knowledge of Native Elders	3
Complete 7 to 9 credits in one of the following focus areas:		7-9
Policy Focus		
AKNS A290	Topics in Alaska Native Studies	
AKNS/PS A346	Alaska Native Politics	
AKNS/PS A313	Tribes, Nations and Peoples	
AKNS/ANTH A461	Decolonizing Methodologies	
AKNS A490	Advanced Topics in Alaska Native Studies	
Language Focus		

AKNS A101A	Elementary Central Yup'ik Language I
or AKNS A101B	Elementary Tlingit Language I
or AKNS A101C	Elementary Alaska Native Language I
or AKNS A101E	Elementary Alutiiq Language I
AKNS A102A	Elementary Central Yup'ik Language II
or AKNS A102B	Elementary Tlingit Language II
or AKNS A102C	Elementary Alaska Native Language II
or AKNS A102E	Elementary Alutiiq Language II
Complete 6 credits from the following in addition to focus area courses above:	
AKNS A101A	Elementary Central Yup'ik Language I
AKNS A101B	Elementary Tlingit Language I
AKNS A101C	Elementary Alaska Native Language I
AKNS A101E	Elementary Alutiiq Language I
AKNS A102A	Elementary Central Yup'ik Language II
AKNS A102B	Elementary Tlingit Language II
AKNS A102C	Elementary Alaska Native Language II
AKNS A102E	Elementary Alutiiq Language II
AKNS A109A	Central Yup'ik Orthography
AKNS A109B	Tlingit Orthography
AKNS A109C	Alaska Native Language Orthography
AKNS A109D	Alutiiq Orthography
AKNS A181	Community Project Planning
AKNS A182	Grant Writing for Alaska Native Communities
AKNS A184	Indigenous Leadership and Civic Engagement
AKNS A185	Event Planning and Meeting Facilitation
AKNS A190	Selected Topics: Alaska Native Cultural Skills
AKNS/MUS A215	Music of Alaska Natives and Indigenous Peoples of Northern Regions
AKNS/MUS A216	World Indigenous Music
AKNS/MUS A218A	Alaska Native Drummaking Techniques: Athabascan and Southeast Style
AKNS/MUS A218B	Alaska Native Drummaking Techniques: Inupiaq and Yup'ik Style
AKNS A230	Oral Traditions of Alaska Native People

6

AKNS A240	Alaska Native Cultural Orientation - Alutiiq/Sugpiaq
AKNS A261	Alaska Native Art History
AKNS A290	Topics in Alaska Native Studies
AKNS A292A	Alaska Native Language Apprenticeship
AKNS A292B	Alaska Native Language Conversational Fluency Intensive
AKNS/PS A313	Tribes, Nations and Peoples
AKNS/PS A346	Alaska Native Politics
AKNS/MUS A356	Yup'ik Music and Dance Ensemble
AKNS/MUS A357	Inupiaq Music and Dance Ensemble
AKNS A432	Indigenous Well-Being and Education
AKNS A482	Indigenous Knowledge(s) and the Sciences in Global Contexts
AKNS A490	Advanced Topics in Alaska Native Studies
AKNS A495	Alaska Native Studies Internship
ANTH A200	Alaska Native Cultures
HIST A341	History of Alaska
JUST A355	Rural Justice
ENGL A445	Alaska Native Literatures
Total Credits	19-21

A minimum of 19 credits is required for the minor, of which 6 credits must be upper-division.

Anthropology

Beatrice McDonald Hall (BMH), Room 231, (907) 786-6840
www.uaa.alaska.edu/anthropology (<http://www.uaa.alaska.edu/anthropology>)

Anthropology is the study of human diversity on a cross-cultural basis, aimed at achieving both scientific and humanistic education goals. Anthropology is comprised of four sub-fields: sociocultural anthropology, biological anthropology, archaeology and anthropological linguistics. The BA/BS degrees are designed to provide the student with a solid general foundation in the discipline by emphasizing understanding of different cultures and peoples as well as different theories and methodologies. Although there is some opportunity for limited specialization, the department believes that such specialization should be deferred until graduate work.

Programs of Study

Bachelor of Arts

- BA in Anthropology (p. 103)

Bachelor of Science

- BS in Anthropology (p. 104)

Minor

- Minor in Anthropology (p. 105)

Faculty

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Bachelor of Arts in Anthropology

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Degrees (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the Major Requirements below.

Major Requirements

Required Support Courses

Code	Title	Credits
Writing		
Complete one of the following courses:		3
WRTG A213	Writing and the Sciences	
ENGL A414	Research Writing	
Statistics		
Complete one of the following courses:		3-4
STAT A200	Elementary Statistics	
STAT A307	Probability and Statistics	
Upper-Division Humanities		
Complete six upper-division credits in ART, ENGL, HIST, PHIL, THR or languages.		6
Total Credits		12-13

Required Anthropology Courses

Code	Title	Credits
Core Anthropology Courses		
Complete the following courses:		
ANTH A202	Cultural Anthropology	3
ANTH A205	Biological Anthropology	4
ANTH A210	Linguistic Anthropology	3
ANTH A211	Archaeology	4
ANTH A410	Anthropological Theory	3
Ethnographic Courses		
Complete the following course:		
ANTH A390A	Arctic and Subarctic Cultures *	3
Complete one of the following courses:		3
ANTH A390B	World Cultures *	
ANTH A390C	Comparative Culture Studies *	
Methodology Courses		
Complete six credits from at least two of the following courses: **		6
ANTH A415	Applied Anthropology	
ANTH A430	Research Methods in Cultural Anthropology	
ANTH A431	Field Methods in Archaeology and Bioanthropology	
ANTH A458	Applied Ethics in Anthropology *	
ANTH A480	Analytical Techniques in Archaeology and Bioanthropology *	
ANTH A487	Field Methods in Cultural Anthropology	
Topical/Theoretical Courses		
Complete six credits from at least two of the following courses: **		6
ANTH A452	Culture and Human Biodiversity	
ANTH A454	Culture and Ecology	
ANTH A455	Culture and Health	
ANTH A464	Culture and Globalization	
ANTH A490A	Health, Ritual and Science *	
ANTH A490B	Historical Engagements *	
ANTH A490C	Belief and Identity *	
ANTH A490D	Topics in the Contemporary North *	
ANTH A490E	Culture, Environment, Place *	
Anthropology Electives		
Complete any additional 3 credits in anthropology.		3
Total Credits		38

* Specific topical emphasis for this course varies by offering. See catalog course descriptions for details.

****** Other upper-division special topics courses (ANTH A490) or independent study courses (ANTH A397 or ANTH A497) may be petitioned to satisfy methodological or topical/theoretical course requirements, depending on course content.

A minimum of 120 credits is required for the degree, of which 42 credits must be upper-division.

Honors in Anthropology

The award of honors in anthropology recognizes outstanding achievement by undergraduate majors in the study of anthropology. To be eligible for departmental honors, a student must satisfy the following requirements:

- 1. Be a declared anthropology major.
- 2. Satisfy all of the requirements for a BA or BS in Anthropology.
- 3. Meet the requirements for Graduation with Honors (p. 38).
- 4. Earn a grade point average of 3.50 or above in courses specific to the anthropology major.
- 5. Complete a senior thesis project (taken as ANTH A499), based on library, laboratory or field research resulting in a substantial, thesis-quality paper defended before the anthropology faculty. The course may be taken on a one-semester (3-credit) or two-semester (6-credit) basis.

Program Student Learning Outcomes

Anthropology is the study of human diversity on a cross-cultural basis, aimed at achieving both scientific and humanistic understandings of the human condition. Anthropology is comprised of four subfields: sociocultural anthropology, biological anthropology, archaeology, and anthropological linguistics. The BA/BS degrees provide students with a solid general foundation in the discipline by emphasizing these four subfields in developing understanding of different cultures and peoples, especially those within Alaska and the Circumpolar North, as well as different anthropological methods and theories.

Students graduating with a B.A./B.S. in Anthropology will be able to:

- 1. Describe current understandings about human behavior and language, cultural processes, the evolution of humans, biocultural diversity, and trajectories of cultural change.
- 2. Demonstrate an understanding of theoretical approaches in anthropology, their foundations, and the issues they are designed to address.
- 3. Explain ethical practice in anthropological research and issues encountered in the discipline.
- 4. Exhibit proficiency in documenting, evaluating, and communicating anthropological information, including perspectives relevant to Alaska and the Circumpolar North.
- 5. Apply anthropological methods and techniques to research questions and practical problems.

Bachelor of Science in Anthropology

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Degrees (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the major requirements below.

Major Requirements

Required Support Courses

Code	Title	Credits
Writing		
Complete one of the following courses:		3
WRTG A213	Writing and the Sciences	
ENGL A414	Research Writing	
Statistics		
Complete one of the following courses:		4
STAT A253	Applied Statistics for the Sciences	
STAT A307	Probability and Statistics	
Upper-Division Natural Sciences		
Complete six upper-division credits in ASTR, BIOL, CHEM, GEOL, LSIS or PHYS.		6
Total Credits		13

Required Anthropology Courses

Code	Title	Credits
Core Anthropology Courses		
Complete the following courses:		
ANTH A202	Cultural Anthropology	3
ANTH A205	Biological Anthropology	4
ANTH A210	Linguistic Anthropology	3
ANTH A211	Archaeology	4
ANTH A410	Anthropological Theory	3
Ethnographic Courses		
Complete the following course:		
ANTH A390A	Arctic and Subarctic Cultures *	3
Complete one of the following courses:		3
ANTH A390B	World Cultures *	
ANTH A390C	Comparative Culture Studies *	
Methodology Courses		
Complete six credits from at least two the following courses:		
**		
ANTH A415	Applied Anthropology	

ANTH A430	Research Methods in Cultural Anthropology
ANTH A431	Field Methods in Archaeology and Bioanthropology
ANTH A458	Applied Ethics in Anthropology *
ANTH A480	Analytical Techniques in Archaeology and Bioanthropology *
ANTH A487	Field Methods in Cultural Anthropology

Topical/Theoretical Courses *

Complete six credits from at least two of the following courses: ** 6

ANTH A452	Culture and Human Biodiversity
ANTH A454	Culture and Ecology
ANTH A455	Culture and Health
ANTH A464	Culture and Globalization
ANTH A490A	Health, Ritual and Science *
ANTH A490B	Historical Engagements *
ANTH A490C	Belief and Identity *
ANTH A490D	Topics in the Contemporary North *
ANTH A490E	Culture, Environment, Place *

Anthropology Electives

Complete any additional 3 credits in anthropology. 3

Total Credits 32

* Specific topical emphasis for this course varies by offering. See catalog course descriptions for details.

** Other upper-division special topics courses (ANTH A490) or independent study courses (ANTH A397 or ANTH A497) may be petitioned to satisfy methodological or topical/theoretical course requirements, depending on course content.

A minimum of 120 credits is required for the degree, of which 42 credits must be upper-division.

Honors in Anthropology

The award of honors in anthropology recognizes outstanding achievement by undergraduate majors in the study of anthropology. To be eligible for departmental honors, a student must satisfy the following requirements:

1. Be a declared anthropology major.
2. Satisfy all of the requirements for a BA or BS in Anthropology.
3. Meet the requirements for Graduation with Honors (p. 38).
4. Earn a grade point average of 3.50 or above in courses specific to the anthropology major.
5. Complete a senior thesis project (taken as ANTH A499), based on library, laboratory or field research resulting in a substantial, thesis-quality paper defended before the anthropology faculty. The

course may be taken on a one-semester (3-credit) or two-semester (6-credit) basis.

Program Student Learning Outcomes

Anthropology is the study of human diversity on a cross-cultural basis, aimed at achieving both scientific and humanistic understandings of the human condition. Anthropology is comprised of four subfields: sociocultural anthropology, biological anthropology, archaeology, and anthropological linguistics. The BA/BS degrees provide students with a solid general foundation in the discipline by emphasizing these four subfields in developing understanding of different cultures and peoples, especially those within Alaska and the Circumpolar North, as well as different anthropological methods and theories.

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1. Describe current understandings about human behavior and language, cultural processes, the evolution of humans, biocultural diversity, and trajectories of cultural change.
2. Demonstrate an understanding of theoretical approaches in anthropology, their foundations, and the issues they are designed to address.
3. Explain ethical practice in anthropological research and issues encountered in the discipline.
4. Exhibit proficiency in documenting, evaluating, and communicating anthropological information, including perspectives relevant to Alaska and the Circumpolar North.
5. Apply anthropological methods and techniques to research questions and practical problems.

Minor in Anthropology

Students majoring in another subject who wish to minor in anthropology must complete the following requirements.

Code	Title	Credits

Core Anthropology Courses

Complete two of the following courses:	6-8

ANTH A101	Introduction to Anthropology
ANTH A202	Cultural Anthropology
ANTH A205	Biological Anthropology
ANTH A210	Linguistic Anthropology
ANTH A211	Archaeology

Ethnographic Courses

Complete 6 credits from at least two of the following courses:	6

ANTH A200	Alaska Native Cultures
ANTH A390A	Arctic and Subarctic Cultures *
ANTH A390B	World Cultures *
ANTH A390C	Comparative Culture Studies *

Methodological, Topical, and Theoretical Courses **

Complete 6 credits from at least two of the following courses:	6

ANTH A415	Applied Anthropology

ANTH A430	Research Methods in Cultural Anthropology	
ANTH A431	Field Methods in Archaeology and Bioanthropology	
ANTH A452	Culture and Human Biodiversity	
ANTH A454	Culture and Ecology	
ANTH A455	Culture and Health	
ANTH A458	Applied Ethics in Anthropology *	
ANTH A464	Culture and Globalization	
ANTH A480	Analytical Techniques in Archaeology and Bioanthropology *	
ANTH A487	Field Methods in Cultural Anthropology	
ANTH A490A	Health, Ritual and Science *	
ANTH A490B	Historical Engagements *	
ANTH A490C	Belief and Identity *	
ANTH A490D	Topics in the Contemporary North *	
ANTH A490E	Culture, Environment, Place *	
Total Credits		18-20

A total of 18 credits is required for the minor, 9 of which must be upper division.

* *Specific topical emphasis for this course varies by offering. See catalog course description for details.*

** *Other upper-division special topics courses (ANTH A490) or independent study courses (ANTH A397 or ANTH A497) may be petitioned to satisfy the methodological/topical/theoretical course requirements, depending on course content.*

Art

Fine Arts Building (ARTS), Room 302A, (907) 786-1783
www.uaa.alaska.edu/art (<http://www.uaa.alaska.edu/art>)

The mission of the Department of Art is to prepare students to use their artistic abilities to make a difference in society. A comprehensive multi-studio approach encourages independent thinking, strengthens creativity, and develops knowledge of the critical and historical aspects of art. Students acquire technical skills and gain the confidence to work with a variety of materials while exploring and evaluating our broad and diverse heritage of art and design. Our goal is to train and graduate students who are empowered artists, focused on excellence in creative activity, learning, and teaching and who are essential to the continued development of our vibrant culture.

The art history area supports gallery exhibitions which are an integral component of the art student's education as well as general education courses in the fine arts and humanities. The art education area provides an introduction for museum and community-based teaching, which are practices necessary for a teaching artist.

Gallery exhibitions, artist lectures, and workshops expose students to contemporary art developments both intellectually and visually. The Kimura Gallery and the Arc Gallery at the Consortium Library offer students and the community an opportunity to view and study the work of local, national and international artists. The Hugh McPeck Gallery in the Student Union provides a venue for students to exhibit their work through a series of invitational and juried exhibitions.

The University of Alaska Anchorage is accredited by the National Association of Schools of Art and Design (NASAD).

Students can choose to pursue a Bachelor of Arts in Art (B.A.), a Bachelors of Fine Arts in Art (B.F.A.), or a Minor in Art.

Bachelor of Arts in Art (B.A.)

The Bachelor of Arts in Art degree combines a diverse liberal arts curriculum with studio art and art history courses. Students enrolled in this program will have the freedom to explore courses in a variety of academic areas, acquire a broad understanding of art and art history, and develop a method of artistic expression using a variety of studio approaches.

Bachelor of Fine Arts in Art (B.F.A.)

The Bachelor of Fine Arts in Art program encourages students to concentrate their efforts in the studio arts. Students who exhibit potential for success through strong coursework in the first two years of their pre-BFA study, are encouraged to submit an application and portfolio for admission into the BFA program during their junior year. Admission into the BFA program is a selective process, requiring acceptance by both the University of Alaska Anchorage and the Department of Art BFA Committee.

BFA candidates are expected to devote a large measure of time to studio work as they plan for a professional life in art. The BFA program provides the candidate with many opportunities for interaction with the department faculty and fellow BFA students, encouraging close working relationships and mentorships. A written thesis and exhibition at the Kimura Gallery in the Fine Arts Building culminates in the completion of the program.

Minor in Art

Students majoring in another academic program who wish to minor in Art, must complete a total of 21 credits in Art, 6 credits of which must be upper division.

Programs of Study

Bachelor of Arts

- BA in Art (p. 107)

Bachelor of Fine Arts

- BFA in Art (p. 108)

Minors

- Minor in Art (p. 110)

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Bachelor of Arts in Art

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Degrees (p. 53).

Advising

- Some courses do not apply to the degree program.
- Some courses may be taken for repeat credit.
- Many Art courses require completion of certain prerequisite Art courses. Non-Art majors who wish to enroll in an Art class without first having completed the recommended prerequisites are free to do so with instructor permission, but may find the classroom experience difficult or unrewarding.
- Art majors must obtain pre-registration approval from Art faculty for upper-division Art coursework undertaken each semester.

Graduation Requirements

- Complete a minimum of 9 credits in one specific studio area.
- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85). A maximum of 60 credits in Art may be applied toward the degree. Transfer students who are candidates for the BA in Art must complete a minimum of 18 Art credits in residence.
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the Major Requirements below.

Major Requirements

Code	Title	Credits
Lower-Division Art		
Core Courses:		18
ART A105	Beginning Drawing	
ART A111	Two-Dimensional Design	
ART A113	Three-Dimensional Design	
ART A205	Intermediate Drawing	
ART A261	History of Western Art I	
ART A262	History of Western Art II	

Choose one two-dimensional course, one three-dimensional course, and one course from either list: 9

Two-Dimensional Area

ART A112	Color Design
ART A212	Beginning Watercolor
ART A213	Beginning Painting
ART A215	Beginning Printmaking
ART A224	Beginning Photography
ART A252	Beginning Graphic Design
ART A257	Computer Art

Three-Dimensional Area

ART A201	Beginning Handbuilt Ceramics
ART A202	Beginning Wheelthrown Ceramics
ART A211	Beginning Sculpture
ART A270	Beginning Alaska Native Art

Upper-Division Studio Art

Complete a total of 15 credits from the studio areas listed below, with a minimum of 9 credits from any one area: 15

Alaska Native Art
Ceramics
Drawing
Illustration
Graphic Design
Painting
Photography
Printmaking
Sculpture

Upper-Division Art History

Complete 6 credits from the following: 6

ART A362	History of Modern Art
ART A363	History of Contemporary Art
ART A364	Italian Renaissance Art
ART A367	History of Photography
ART A492	Art History Seminar

Additional Requirements

ART A203	Introduction to Art Education	3
ART A491	Senior Seminar	3
PHIL A401	Aesthetics	3
Upper-division general electives *		12
Total Credits		69

* At least 6 of the 12 elective credits must have a prefix other than ART.

A total of 120 credits is required for the degree, of which 42 credits must be upper-division.

A total of 60 credits in Art may be applied to the degree.

Program Student Learning Outcomes

Students graduating with a Bachelor of Arts in Art will be able to demonstrate:

- An understanding of the multiple ways in which creative thinking may be applied to a variety of intellectual, social, and professional circumstances
- A broad knowledge of contemporary and historical contexts in the visual arts
- Critical thinking, writing, and research skills leading to creative problem solving
- Effective application of techniques, composition, and materials to express ideas through a variety of media

Bachelor of Fine Arts in Art

The Bachelor of Fine Arts (BFA) program allows students to concentrate their efforts in a studio art education. Mentorship by dedicated faculty prepares students for a successful career in the arts.

Admission into the Bachelor of Fine Arts program is a selective process, requiring acceptance by both the University of Alaska Anchorage and the Department of Art BFA Committee. Students who exhibit the potential for success through strong coursework and portfolio are encouraged to apply for admission into the program.

Students who become BFA candidates have demonstrated the considerable commitment required for the study and production of art. BFA candidates are expected to devote a large measure of time to studio work as they plan for a professional life in art.

The structure of the program provides the candidate with many opportunities for interaction with the department faculty and fellow BFA students, encouraging close working relationships and mentorship.

Completion of the program culminates in a written thesis and exhibition at the Kimura Gallery in the Fine Arts Building.

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Admission into the BFA program, withdrawal from it and granting of the degree is at the discretion of the BFA Committee.

Students admitted into the BFA program must complete a minimum of 24 Art credits (upper- or lower-division courses) in residence at UAA.

A student must choose a primary studio area of concentration and a secondary studio area of emphasis. A primary studio area of concentration is defined by a student completing a minimum of 15 credits within a specific area of study. A secondary studio area of emphasis is defined by a student completing 9-12 credits within a specific area of study.

Transfer students need a minimum of 12 resident Art credits: 9 credits must be completed in the primary studio area of concentration, and a minimum of 3 resident Art credits completed in the secondary studio area of emphasis.

Applicants for admission into the BFA program must meet the following minimum requirements:

- Applicants must have been officially admitted to UAA as a declared pre-BFA in the program.
- Applicants must have completed all lower-division Art major courses in the Foundation Core and the Beginning Studio categories.
- Applicants must have been enrolled at UAA for at least one semester prior to application to full BFA status.
- Applicants must meet minimum academic GPA requirements of 2.50 for overall coursework and 3.00 for overall Art coursework.

Refer to the most recent BFA Handbook on the Department of Art website for more details.

The following materials must be submitted to the Department of Art at least two weeks prior to the BFA Committee's scheduled application review:

- *Application for Admission* form.
- *Letter of Intent* stating objectives and qualifications in relation to the BFA in Art program.
- *BFA Procedures and Requirements* form signed by the student and the art faculty advisor indicating an understanding of BFA procedures and requirements.
- Copies of all college transcripts.
- *A Projected Plan of Study* signed by the College of Arts and Sciences academic advisor for the Fine Arts Division.
- Portfolio of 15-20 pieces of artwork in the primary studio area of concentration and secondary studio area of emphasis showing technical skills, design abilities and a potential for developing a conceptual vision. Applicants must submit work for consideration in digital formats. Applications will be reviewed only in the fall semester. Admission decisions are determined by a consensus of BFA Committee members in the fall semester.

Academic Requirements

To graduate with a BFA in Art, students must have met the following GPA requirements:

1. A minimum overall major GPA of 3.00 in the major.
2. A minimum GPA of 3.50 in the primary studio area of concentration
3. A minimum cumulative GPA of 2.50 in all university coursework.

Semester Reviews

The progress of all BFA candidates will be reviewed a minimum of once a semester by the BFA Committee.

Thesis Project and Capstone Course

Upon completion of all studio courses in the primary studio area of concentration and secondary studio area of emphasis, approved BFA candidates will enroll in ART A491 Senior Seminar in the fall semesters, and ART A499 Thesis in the spring semesters only. ART A491 fulfills the integrative capstone GER requirement.

Students enrolled in the BFA program must submit their thesis proposal for approval during the fall semester of the academic year.

Once the BFA Committee has reviewed and accepted the thesis proposals, candidates will be granted permission to register for ART A499. During ART A499 students will complete a body of work that will culminate in a formal exhibition. BFA students enrolled in ART A499 will meet with the BFA Committee a minimum of twice a semester.

The BFA Committee's evaluation of the student's thesis project will be based on content, exhibition presentation and the degree of success in visual realization of the written proposal. At least 10 digital images of the student's thesis artwork must be submitted to the Department of Art. These images must meet the standards set by the BFA Committee and will become the property of the Department of Art. The digital images must be received by the department before a grade for ART A499 is awarded.

Exhibitions and Presentations

BFA candidates will participate in the BFA Group Show which is generally held in the Kimura Gallery. The BFA Committee must approve all aspects of the thesis exhibition. The BFA Group Show will be held during the spring semester each year. Prior to completing all BFA requirements, the student is responsible for submitting an *Application for Graduation* to obtain the degree.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the Major Requirements below.

Major Requirements

Code	Title	Credits
Foundation Core Courses		
ART A105	Beginning Drawing	3
ART A111	Two-Dimensional Design	3
ART A112	Color Design	3
ART A113	Three-Dimensional Design	3
ART A205	Intermediate Drawing	3
ART A261	History of Western Art I	3
ART A262	History of Western Art II	3
ART A307	Life Drawing and Composition I	3
Beginning Studio Electives		
Choose one course from the two-dimensional list and one course from the three-dimensional list, and one course from either list:		9
Two-Dimensional Area		
ART A212	Beginning Watercolor	
ART A213	Beginning Painting	
ART A215	Beginning Printmaking	

ART A224	Beginning Photography
ART A252	Beginning Graphic Design
ART A257	Computer Art
Three-Dimensional Area	
ART A201	Beginning Handbuilt Ceramics
ART A202	Beginning Wheelthrown Ceramics
ART A211	Beginning Sculpture

Art History

Select three of the following: 9

ART A362	History of Modern Art
ART A363	History of Contemporary Art
ART A364	Italian Renaissance Art
ART A367	History of Photography
ART A492	Art History Seminar

Primary Studio Area of Concentration and Secondary Studio Area of Emphasis

Select a primary studio area of concentration and a secondary studio area of emphasis from the following:

Ceramics
Drawing
Illustration
Painting
Photography
Printmaking
Sculpture

Primary Studio Area of Concentration

Select a primary studio area of concentration from the list above and complete the following studio courses in the same concentration:

200-level studio course *	3
300-level studio course	6
400-level studio course	6

Select a support course from the following: 3

ART A390	Selected Topics in Studio Art
ART A490	Selected Topics in Studio Art
ART A498	Individual Research
Other courses by permission	

Secondary Studio Area of Emphasis

Select a secondary studio area of emphasis from the list above and complete the following studio courses in the same emphasis:

200-level studio course **	3
300-level studio course	3
Select a support course from following:	3

300-level studio course	
400-level studio course	
ART A390	Selected Topics in Studio Art
ART A490	Selected Topics in Studio Art
ART A498	Individual Research

Other courses by permission		
Thesis Requirements		
ART A491	Senior Seminar (fall semesters only)	3
ART A499	Thesis (spring semesters only)	3
Additional Requirements		
ART A203	Introduction to Art Education	3
PHIL A401	Aesthetics	3
Complete 6 credits of electives selected from art history or art studio courses.		6
Total Credits		87

* Students must choose a beginning course studio area of concentration. Exception: Students with a drawing concentration may choose from any 200-level two-dimensional class listed under Beginning Studio Electives.

** Must be other than a course selected to fulfill the Beginning Studio Electives within the Foundation Core.

A total of 121 credits is required for the degree, of which 42 credits must be upper-division. A maximum of 84 credits in ART can be applied to the degree.

Program Student Learning Outcomes

Students graduating with a Bachelor of Fine Arts will be able to demonstrate:

- Mastery of techniques, composition, and the use of materials to express ideas in a cohesive body of work.
- A comprehensive knowledge of contemporary and historical contexts in the visual arts.
- Critical thinking, writing and research skills in the discovery of original approaches to creative problem solving.
- Effective professional skills to be a practicing artist as applied to art proposals, exhibitions and business matters.

Minor in Art

Students majoring in another subject who wish to minor in art must complete the following requirements.

Code	Title	Credits
Art History		3
ART A262	History of Western Art II	
Design		6
ART A111	Two-Dimensional Design	
ART A113	Three-Dimensional Design	
Drawing		3
ART A105	Beginning Drawing	
Studio		3
Select one lower-division studio art course from the following:		
ART A201	Beginning Handbuilt Ceramics	

ART A202	Beginning Wheelthrown Ceramics
ART A205	Intermediate Drawing
ART A211	Beginning Sculpture
ART A212	Beginning Watercolor
ART A213	Beginning Painting
ART A215	Beginning Printmaking
ART A224	Beginning Photography
ART A252	Beginning Graphic Design
ART A257	Computer Art
ART A270	Beginning Alaska Native Art

Select two upper-division studio art courses from the same studio area as the lower-division studio art course. 6

Painting	
Drawing	
Illustration	
Graphic Design	
Photography	
Printmaking	
Ceramics	
Sculpture	
Alaska Native Art	
Total Credits	21

A total of 21 credits is required for the minor, 6 credits of which must be upper-division.

Biological Sciences

ConocoPhillips Integrated Sciences Building (CPSB), Room 101, (907) 786-1298

www.uaa.alaska.edu/biological-sciences (<http://www.uaa.alaska.edu/biological-sciences>)

Biology is the science concerned with the study of living organisms. It encompasses a vast range of biological disciplines, from the study of microbes and molecular biology to the study of plants, animals and the environment. The undergraduate program in the biological sciences includes courses that provide students with a broad understanding of both traditional and modern biological sciences. These courses are suitable as preparation for professional degrees, teaching, or careers in government or industry. Both the Bachelor of Arts and the Bachelor of Science degrees are available for undergraduates. A Master of Science program in Biological Sciences as well as a joint UAA-UAF Doctor of Philosophy program are available for students already holding a baccalaureate degree.

A program of study in the biological sciences requires completion of a basic science core curriculum in the chemical, physical and mathematical sciences as well as required and elective courses in the biological sciences. A degree in the biological sciences prepares students who wish to pursue careers in medicine, dentistry, veterinary medicine, ecology and the environmental sciences in the private or public sector, or who wish to attend graduate school. Students are strongly encouraged to consult with their academic advisors within the

Department of Biological Sciences to determine which electives best suit their programmatic needs and career requirements.

The Bachelor of Arts and the Bachelor of Science programs can be completed in four years by students who have had adequate high school preparation in math and sciences.

Community Service Courses

The department offers a wide range of community service courses as a service to the people in the Anchorage area and extended campuses who wish to become more knowledgeable about the science of biology and how it relates to them. Unless noted otherwise in the course description, community service courses do not satisfy either core requirements or elective credit toward any degree programs in the biological sciences. All are offered as demand warrants.

Code	Title	Credits
BIOL A074	Field Natural History	1-3
BIOL A075	Local Flora	1
BIOL A100	Human Biology	3
BIOL A124	Biota of Alaska: Selected Topics	1-4

Natural Sciences

The Department of Biological Sciences also oversees the Bachelor of Science in Natural Sciences. This curriculum emphasizes the interrelationships among the sciences. A program of study in the natural sciences requires that students select an option within the degree and complete all courses required within the option, as well as sufficient science elective courses to meet minimum unit requirements for graduation. Students accepted into this flexible degree program select one of three options:

- General Sciences Option: designed for students who are interested in understanding the interrelationships among various scientific fields, or in teaching science at the secondary level.
- Pre-Health Professions Option: designed to meet the admission requirements of specific professional schools in medicine, dentistry and veterinary medicine.
- Environmental Sciences Option: designed to prepare students for graduate school or for employment in the private or public sector.

For a complete program description see Natural Sciences (p. 145).

Programs of Study

Bachelor of Arts

- BA in Biological Sciences (p. 111)

Bachelor of Science

- BS in Biological Sciences (p. 113)

Faculty

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Bachelor of Arts in Biological Sciences

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Degrees (p. 53).

Academic Requirements

To graduate with a BA in Biological Sciences, the student must complete all courses covered under major requirements for a BA in Biological Sciences with a grade of C or better. All prerequisites for Biology (BIOL) courses must be completed with a grade of C or better. Students who audit or are unable to earn a grade of C or better in a lower-division (100- or 200-level) BIOL course may repeat the course two additional times on a space-available basis. Students who audit or are unable to earn a grade of C or better in an upper-division (300- or 400-level) BIOL course may repeat the course one additional time on a space-available basis. Students repeating a BIOL course are required to complete all components of that course during the semester in which the course is retaken. When repeating a course with a lecture and laboratory component, both components must be repeated. Students enrolled in a BIOL laboratory must attend lab the first week of class or they may be administratively dropped.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).

- Complete the major requirements below. Some major requirements may also be used to satisfy the General University Requirements and General Education Requirements for Baccalaureate Degrees.
- Major requirements include both 27 credits in support courses from outside the discipline and 52-53 credits of coursework in biology, other natural sciences and math.
- Submit a completed ePortfolio.
- Complete an exit examination.

Major Requirements

Code	Title	Credits
Support Courses		
Complete 27 credits from the following prefixes, 9 credits of which must be upper-division, and may include courses from the general education requirements lists. You must complete a minimum of 3 credits from each of the following areas:		27
Fine Arts (ART, CWLA, DNCE, MUS, THR)		
Humanities (AKNS, ART, ASL, CHIN, ENGL, FREN, GER, HIST, HUM, JPN, LING, PHIL, PS, RUSS, SPAN)		
Social Sciences (ANTH, BA, CEL, ECON, ENVI, GEOG, INTL, HS, JPC, JUST, LEGL, PSY, SOC, SWK, WS)		
Core Courses		
BIOL A108	Principles and Methods in Biology	6
BIOL A242	Fundamentals of Cell Biology	3
BIOL A243	Experiential Learning: Cell Biology and Genetics	4
or BIOL A273	Experiential Learning: Ecology and Evolution	
BIOL A252	Principles of Genetics	3
BIOL A271	Principles of Ecology	3
BIOL A288	Principles of Evolution	3
BIOL A492	Undergraduate Seminar	1
CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	4
CHEM A106 & A106L	General Chemistry II and General Chemistry II Laboratory	4
STAT A200	Elementary Statistics	3-4
or STAT A253	Applied Statistics for the Sciences	
or STAT A307	Probability and Statistics	
Upper-Division Program Electives		18
Complete a minimum of 3 credits from four of the five subject areas. A minimum of 6 credits must be experiential learning courses from two subject areas. *		
Genetics, Cellular and Molecular Biology		
BIOL A452	Human Genome	
BIOL A455	Experiential Learning: Bioinformatics	
BIOL A461	Molecular Biology	

BIOL A463	Molecular Biology of Cancer
BIOL A464	Metals in Biology
BIOL A465	Experiential Learning: Molecular Biology
BIOL/CHEM A471	Immunology
MBIO A340	Microbial Biology
MBIO A342	Experiential Learning: Microbial Biology
MBIO A420	Pathogenic Microbiology
MBIO A421	Experiential Learning: Pathogenic Microbiology
MBIO A451	Microbial Biotechnology
MBIO A452	Microbial Genetics
MBIO A462	Virology
Ecology and Evolution	
BIOL/ASTR A365	Astrobiology
BIOL A430	Marine Mammal Biology
BIOL A441	Animal Behavior
BIOL A442	Experiential Learning: Animal Behavior
BIOL A466	Fish Ecology
BIOL A467	Wildlife Population Dynamics and Management
BIOL A472	Biogeography
BIOL A473	Conservation Biology
BIOL A474	Ecotoxicology
BIOL A477	Tundra and Taiga Ecosystems
BIOL A478	Biological Oceanography
BIOL A479	Physiological Plant Ecology
BIOL A480	Ecological and Conservation Genetics
BIOL A481	Marine Biology
BIOL A482	Spatial Ecology
BIOL A483	Exploration Ecology
BIOL A484	Experiential Learning: Exploration Ecology Field Study
BIOL A486	Evolutionary Ecology
BIOL A489	Population Genetics and Evolutionary Processes
MBIO A450	Microbial Ecology
MBIO A453	Experiential Learning: Microbial Ecology
MBIO/GEOL A468	Geomicrobiology
Diversity and Organismal Biology	
BIOL A320	Vertebrate Biology
BIOL A321	Experiential Learning: Vertebrate Biology
BIOL A330	Plant Biology
BIOL A332	Experiential Learning: Plant Biology

BIOL A423	Ichthyology
BIOL A427	Marine Invertebrate Biology
BIOL A430	Marine Mammal Biology
BIOL A431	Plant Diversity and Evolution
BIOL A487	Comparative Anatomy of Vertebrates
MBIO A340	Microbial Biology
MBIO A342	Experiential Learning: Microbial Biology
MBIO A440	Microbial Diversity
Physiology	
BIOL A310	Principles of Animal Physiology
BIOL A311	Experiential Learning: Animal Physiology
BIOL A316	Principles of Plant Physiology
BIOL A317	Experiential Learning: Plant Physiology
BIOL A412	Behavioral Endocrinology
BIOL A413	Neurophysiology
BIOL A414	Chronobiology
BIOL A415	Comparative Animal Physiology
BIOL A417	Applied Kinesiology and Exercise Physiology
BIOL A418	Fish Physiology
BIOL A479	Physiological Plant Ecology
BIOL A487	Comparative Anatomy of Vertebrates
MBIO A410	Microbial Physiology
Additional Upper-Division Electives	
BIOL A406	Experiential Learning: Biostatistics
BIOL A408	Experiential Learning: Scanning Electron Microscopy (SEM)
BIOL/CHEM/PHYS A456	Nonlinear Dynamics and Chaos
BIOL A490	Selected Lecture Topics in Biology
BIOL A490L	Selected Laboratory Topics in Biology *
BIOL A495	Instructional Practicum: Laboratory
BIOL A497	Independent Study in Biology
BIOL A498	Individual Research *
BIOL A499	Senior Thesis
Total Credits	79-80

* Several courses are listed in more than one area. Each course can only count toward the credit requirement in one area. BIOL A498 and BIOL A490L credits may not be counted toward the experiential learning minimum requirement.

A total of 120 credits is required for the degree, 42 credits of which must be upper-division.

ePortfolio

All BA Biological Sciences majors are required to submit their completed ePortfolios during the semester they intend to graduate. EPortfolios are used for the purpose of program assessment only.

Biological Sciences Exit Examination

All BA Biological Sciences majors are required to complete a nationally standardized exit examination during the semester immediately prior to or during the semester they intend to graduate. There is no minimum score required for graduation.

Honors in Biological Sciences

Undergraduate biological science majors may be recognized for exceptional performance by earning departmental honors in biology. In order to receive honors, a student must meet each of the following requirements:

1. Meet the requirements for Graduation with Honors (p. 38).
2. Meet the requirements for a BA in Biological Sciences.
3. Earn a grade point average of 3.50 or above in the major requirements.
4. During the senior year of their academic program, the student must gain faculty approval for and complete, with a grade of B or better, a senior thesis research project, with enrollment in BIOL A499. Biological science faculty members must approve the project proposal and final written report.

Program Student Learning Outcomes

Students graduating with a Bachelor of Arts or a Bachelor of Science in Biological Sciences will be able to:

- Demonstrate an understanding of the core concepts in the biological sciences: evolution; structure and function relationships; information flow, exchange and storage; transformation of energy and matter.
- Apply the process of science and construct knowledge through observations, experimentation, quantitative reasoning and hypothesis testing.
- Read, analyze and synthesize primary literature, and communicate scientific concepts and data in written and oral form.

Bachelor of Science in Biological Sciences

The Bachelor of Science in Biological Sciences includes a single core program of coursework with two areas of study. Completing courses from the cellular and molecular biology area prepares students for professional careers in areas such as medicine, dentistry and veterinary science. Completing courses from the organismal, ecology and evolutionary area prepares students for careers in environmental, organismal and evolutionary biology. A wide selection of electives is available to all students, including courses offered under BIOL A490, which is a selected topics course. It is imperative that students consult their academic advisors within the Department of Biological Sciences to determine which electives are most appropriate to their career interests.

Some of these elective courses are offered periodically, depending on demand. Refer to course descriptions to identify these courses.

Admission Requirements

- Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).
- Declare the major (see major requirements below) and select one of two options: biological sciences or microbiological sciences. To choose an option, students must meet with an advisor. To schedule the advising session, contact the Department of Biological Sciences.

Academic Requirements

To graduate with a BS in Biological Sciences, the student must complete all courses covered under major requirements for a BS in Biological Sciences with a grade of C or better. All prerequisites for Biology (BIOL) courses must be completed with a grade of C or better. Students who audit or are unable to earn a grade of C or better in a lower-division (100- or 200-level) BIOL course may repeat the course two additional times on a space available basis. Students who audit or are unable to earn a grade of C or better in an upper-division (300- or 400-level) BIOL or Microbiology (MBIO) course may repeat the course one additional time on a space-available basis. Students repeating a BIOL or MBIO course are required to complete all components of that course during the semester in which the course is retaken. When repeating a course with a lecture and laboratory component, both components must be repeated. Students enrolled in a BIOL or MBIO laboratory or experiential learning course must attend the lab or course the first week of class or they may be administratively dropped.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the College of Arts and Sciences requirements.
- Complete the major requirements below.
- Submit a completed ePortfolio.
- Complete an exit examination.

Major Requirements

Biological Sciences Option

Code	Title	Credits
Required Support Courses		
CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	4
CHEM A106 & A106L	General Chemistry II and General Chemistry II Laboratory	4
CHEM A321	Organic Chemistry I	3
CHEM A322	Organic Chemistry II	3
CHEM A323L	Organic Chemistry Laboratory	2
MATH A251	Calculus I	4

MATH A252	Calculus II	4
STAT A253 or STAT A307	Applied Statistics for the Sciences Probability and Statistics	4
Select one of the following options:		8

Option 1:

PHYS A123 & A123L	College Physics I and College Physics I Laboratory
PHYS A124 & A124L	College Physics II and College Physics II Laboratory

Option 2:

PHYS A211 & A211L	General Physics I and General Physics I Laboratory
PHYS A212 & A212L	General Physics II and General Physics II Laboratory

Core Courses

BIOL A108	Principles and Methods in Biology	6
BIOL A242	Fundamentals of Cell Biology	3
BIOL A243 or BIOL A273	Experiential Learning: Cell Biology and Genetics Experiential Learning: Ecology and Evolution	4
BIOL A252	Principles of Genetics	3
BIOL A271	Principles of Ecology	3
BIOL A288	Principles of Evolution	3
BIOL A492	Undergraduate Seminar	1

Upper-Division Program Electives

Complete a minimum of 3 credits from four of the five subject areas. A minimum of 6 credits must be experiential learning courses from two subject areas. *

Genetics, Cellular and Molecular Biology

BIOL A452	Human Genome
BIOL A454	Experiential Learning: Microbial Biotechnology
BIOL A455	Experiential Learning: Bioinformatics
BIOL A461	Molecular Biology
BIOL A463	Molecular Biology of Cancer
BIOL A464	Metals in Biology
BIOL A465	Experiential Learning: Molecular Biology
BIOL/CHEM A471	Immunology
MBIO A340	Microbial Biology
MBIO A342	Experiential Learning: Microbial Biology
MBIO A420	Pathogenic Microbiology
MBIO A421	Experiential Learning: Pathogenic Microbiology
MBIO A451	Microbial Biotechnology
MBIO A452	Microbial Genetics
MBIO A462	Virology

Ecology and Evolution

BIOL/ASTR A365	Astrobiology
BIOL A430	Marine Mammal Biology
BIOL A441	Animal Behavior
BIOL A442	Experiential Learning: Animal Behavior
BIOL A466	Fish Ecology
BIOL A467	Wildlife Population Dynamics and Management
BIOL A472	Biogeography
BIOL A473	Conservation Biology
BIOL A474	Ecotoxicology
BIOL A477	Tundra and Taiga Ecosystems
BIOL A478	Biological Oceanography
BIOL A479	Physiological Plant Ecology
BIOL A480	Ecological and Conservation Genetics
BIOL A481	Marine Biology
BIOL A482	Spatial Ecology
BIOL A483	Exploration Ecology
BIOL A484	Experiential Learning: Exploration Ecology Field Study
BIOL A486	Evolutionary Ecology
BIOL A489	Population Genetics and Evolutionary Processes
MBIO A450	Microbial Ecology
MBIO A453	Experiential Learning: Microbial Ecology
MBIO/GEOL A468	Geomicrobiology
Diversity and Organismal Biology	
BIOL A320	Vertebrate Biology
BIOL A321	Experiential Learning: Vertebrate Biology
BIOL A330	Plant Biology
BIOL A332	Experiential Learning: Plant Biology
BIOL A423	Ichthyology
BIOL A427	Marine Invertebrate Biology
BIOL A430	Marine Mammal Biology
BIOL A431	Plant Diversity and Evolution
BIOL A487	Comparative Anatomy of Vertebrates
MBIO A340	Microbial Biology
MBIO A342	Experiential Learning: Microbial Biology
MBIO A420	Pathogenic Microbiology
MBIO A421	Experiential Learning: Pathogenic Microbiology
MBIO A440	Microbial Diversity
Physiology	
BIOL A310	Principles of Animal Physiology

BIOL A311	Experiential Learning: Animal Physiology
BIOL A316	Principles of Plant Physiology
BIOL A317	Experiential Learning: Plant Physiology
BIOL A412	Behavioral Endocrinology
BIOL A413	Neurophysiology
BIOL A414	Chronobiology
BIOL A415	Comparative Animal Physiology
BIOL A417	Applied Kinesiology and Exercise Physiology
BIOL A418	Fish Physiology
BIOL A479	Physiological Plant Ecology
BIOL A487	Comparative Anatomy of Vertebrates
MBIO A410	Microbial Physiology
Additional Upper-Division Electives	
BIOL A406	Experiential Learning: Biostatistics
BIOL A408	Experiential Learning: Scanning Electron Microscopy (SEM)
BIOL/CHEM/PHYS A456	Nonlinear Dynamics and Chaos
BIOL A490	Selected Lecture Topics in Biology
BIOL A490L	Selected Laboratory Topics in Biology *
BIOL A495	Instructional Practicum: Laboratory
BIOL A497	Independent Study in Biology
BIOL A498	Individual Research *
BIOL A499	Senior Thesis *
CHEM A441	Principles of Biochemistry I
CHEM A442	Principles of Biochemistry II
CHEM A443	Biochemistry Laboratory

Total Credits 83

Microbiological Sciences Option

Code	Title	Credits
Required Support Courses		
CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	4
CHEM A106 & A106L	General Chemistry II and General Chemistry II Laboratory	4
CHEM A321	Organic Chemistry I	3
CHEM A322	Organic Chemistry II	3
CHEM A323L	Organic Chemistry Laboratory	2
MATH A251	Calculus I	4
MATH A252	Calculus II	4
STAT A253	Applied Statistics for the Sciences	4

or STAT A307 Probability and Statistics
Select one of the following options: 8

Option 1:

PHYS A123 & A123L College Physics I and College Physics I Laboratory
PHYS A124 & A124L College Physics II and College Physics II Laboratory

Option 2:

PHYS A211 & A211L General Physics I and General Physics I Laboratory
PHYS A212 & A212L General Physics II and General Physics II Laboratory

Core Courses

BIOL A108	Principles and Methods in Biology	6
BIOL A242	Fundamentals of Cell Biology	3
BIOL A243	Experiential Learning: Cell Biology and Genetics	4
or BIOL A273	Experiential Learning: Ecology and Evolution	
BIOL A252	Principles of Genetics	3
BIOL A271	Principles of Ecology	3
BIOL A288	Principles of Evolution	3
BIOL A492	Undergraduate Seminar	1
MBIO A340	Microbial Biology	3
MBIO A342	Experiential Learning: Microbial Biology	4
MBIO A410	Microbial Physiology	3
MBIO A452	Microbial Genetics	3

Upper-Division Program Electives 11

Complete a minimum of 3 credits each from the Host-Microbe Interactions subject area and the Microbial Diversity and Environmental Microbiology subject area. A minimum of 2 credits must be experiential learning courses from one of the three subject areas.*

Host-Microbe Interactions

BIOL/CHEM A471 Immunology
MBIO A420 Pathogenic Microbiology
MBIO A421 Experiential Learning: Pathogenic Microbiology
MBIO A462 Virology

Microbial Diversity and Environmental Microbiology

MBIO A440 Microbial Diversity
MBIO A450 Microbial Ecology
MBIO A451 Microbial Biotechnology
MBIO A453 Experiential Learning: Microbial Ecology
MBIO/GEOL A468 Geomicrobiology

Additional Upper-Division Electives

BIOL/ASTR A365 Astrobiology
BIOL A455 Experiential Learning: Bioinformatics

BIOL A490 Selected Lecture Topics in Biology

BIOL A490L Selected Laboratory Topics in Biology

BIOL A495 Instructional Practicum: Laboratory

BIOL A497 Independent Study in Biology

BIOL A498 Individual Research

BIOL A499 Senior Thesis

CHEM A441 Principles of Biochemistry I

CHEM A442 Principles of Biochemistry II

CHEM A443 Biochemistry Laboratory

Total Credits 83

* Several courses are listed in more than one area. Each course can only count toward the credit requirement in one area. BIOL A498 and BIOL A490L credits may not be counted toward the experiential learning minimum requirement in the Biological Sciences and Microbiological Sciences option. CHEM A443 credits may not be counted toward the experiential learning minimum requirement in the Microbiological Sciences option.

A total of 121-125 credits is required for the degree, 42 credits of which must be upper division.

ePortfolio

All BS Biological Sciences majors are required to submit their completed ePortfolios during the semester they intend to graduate. EPortfolios are used for the purpose of program assessment only.

Biological Sciences Exit Examination

All BS Biological Sciences majors are required to complete a nationally standardized exit examination during the semester immediately prior to or during the semester they intend to graduate. There is no minimum score required for graduation.

Honors in Biological Sciences

Undergraduate biological science majors may be recognized for exceptional performance by earning departmental honors in biology. In order to receive honors, a student must meet each of the following requirements:

1. Meet the requirements for Graduation with Honors (p. 38).
2. Meet the requirements for a BS in Biological Sciences.
3. Earn a grade point average of 3.50 or above in the major requirements.
4. During the senior year of their academic program, the student must gain faculty approval for and complete, with a grade of B or better, a senior thesis research project, with enrollment in BIOL A499. Biological science faculty members must approve the project proposal and final written report.

Program Student Learning Outcomes

Students graduating with a Bachelor of Arts or a Bachelor of Science in Biological Sciences will be able to:

- Demonstrate an understanding of the core concepts in the biological sciences: evolution; structure and function relationships; information flow, exchange and storage; transformation of energy and matter.
- Apply the process of science and construct knowledge through observations, experimentation, quantitative reasoning and hypothesis testing.
- Read, analyze and synthesize primary literature, and communicate scientific concepts and data in written and oral form.

Chemistry

ConocoPhillips Integrated Sciences Building (CPSB), Room 101, (907) 786-1298

www.uaa.alaska.edu/chemistry (<http://www.uaa.alaska.edu/chemistry>)

Chemistry is the science concerned with substances and their properties, composition and reactions. Recent advances in chemistry have exerted a profound influence on the progress of medicine, agriculture, industry and commerce.

The undergraduate courses in Chemistry offered at UAA are designed primarily to provide a broad knowledge of the field as a part of the program of liberal education offered by the College of Arts and Sciences. They are also designed to provide a substantial foundation in chemistry for students interested in further studies in chemistry or the other sciences, preparation for professional degrees, teaching, or a career in government or industry.

Biochemistry is a more biologically oriented approach to chemistry. During the past 25 years, biochemistry has become a central scientific discipline linking the chemical, physical and biological sciences. By applying the concepts and methods of chemistry to the problems of biology, biochemists have made great progress in explaining life in chemical terms.

High School Preparation

Undergraduate chemistry courses assume appropriate high school preparation. Consult the College of Arts and Sciences list of recommended preparatory courses (p. 98) in all disciplines. The specific coursework which a student must have mastered includes:

Code	Title	Credits
English	4 years	
Mathematics		
	Algebra (Including complex numbers, logarithms, quadratic functions, inequalities and absolute values plus conic sections)	2 years

Geometry	1 year
Trigonometry	1/2 year
Natural Sciences	
Physics (Including mechanics, thermodynamics, electricity and magnetism and optics)	1 year
Chemistry (Including elementary laboratory procedures, introduction to atoms and molecules, chemical reactions, equilibrium, and an introduction to chemical calculations)	1 year

It is strongly recommended that students graduating from high school without the preparation indicated above enroll in available preparatory courses during the summer session to make up deficiencies so that they can begin the fall semester with the correct sequence of the freshman chemistry curriculum. Students are reminded that it is imperative to regularly (at least once per semester) consult a departmental advisor to evaluate their progress through the program of study.

Programs of Study

Bachelor of Science

- BS in Chemistry (p. 117)

Faculty

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Bachelor of Science in Chemistry

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Advising

Students are strongly encouraged to talk to a faculty advisor in the Chemistry Department to ensure that the necessary math and science courses are taken in the first two years of study.

Academic Requirements

In order to graduate with a BS in Chemistry, all courses covered under major requirements must be completed with a grade C or better.

Graduation Requirements

1. Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
2. Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
3. Complete the major requirements below.

Major Requirements

Students complete a BS in Chemistry with a biochemistry emphasis.

Code	Title	Credits
BIOL A108	Principles and Methods in Biology	6
BIOL A242	Fundamentals of Cell Biology	3
BIOL A243	Experiential Learning: Cell Biology and Genetics	4
BIOL A252	Principles of Genetics	3
BIOL A461	Molecular Biology	3
or BIOL A465	Experiential Learning: Molecular Biology	
CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	4
CHEM A106 & A106L	General Chemistry II and General Chemistry II Laboratory	4
CHEM A208	Principles of Bioinorganic Chemistry	3
CHEM A218	Experiential Learning: Quantitative Chemical Analysis	5
CHEM A321	Organic Chemistry I	3
CHEM A322	Organic Chemistry II	3
CHEM A323L	Organic Chemistry Laboratory	2
CHEM A411	Biophysical Chemistry	3
CHEM A418	Experiential Learning: Chemical Instrumentation and Methods	5
CHEM A441	Principles of Biochemistry I	3
CHEM A442	Principles of Biochemistry II	3
CHEM A443	Biochemistry Laboratory	2
CHEM A481	Experiential Learning: Undergraduate Seminar I	1
CHEM A482	Experiential Learning: Undergraduate Seminar II	2
MATH A155	Precalculus	5

MATH A251	Calculus I	4
STAT A253	Applied Statistics for the Sciences	4
Complete a PHYS sequence:		8
PHYS A123 & A123L	College Physics I and College Physics I Laboratory	
PHYS A124 & A124L	College Physics II and College Physics II Laboratory	
or		
PHYS A211 & A211L	General Physics I and General Physics I Laboratory	
PHYS A212 & A212L	General Physics II and General Physics II Laboratory	
Choose 13 credits from the following upper division electives:		13
CHEM A450	Environmental Chemistry	
CHEM/BIOL/PHYS A456	Nonlinear Dynamics and Chaos	
CHEM/BIOL A471	Immunology	
CHEM A477	Bioanalytical Chemistry	
CHEM A480	Molecular Spectroscopy and Structure	
CHEM A495	Chemistry Internship	
CHEM A498	Individual Research	
BIOL A310	Principles of Animal Physiology	
BIOL A406	Experiential Learning: Biostatistics	
BIOL A412	Behavioral Endocrinology	
BIOL A413	Neurophysiology	
BIOL A452	Human Genome	
BIOL A454	Experiential Learning: Microbial Biotechnology	
BIOL A463	Molecular Biology of Cancer	
BIOL A464	Metals in Biology	
BIOL A465	Experiential Learning: Molecular Biology	
BIOL A474	Ecotoxicology	
BIOL A498	Individual Research	
MBIO A340	Microbial Biology	
MBIO A342	Experiential Learning: Microbial Biology	
MBIO A410	Microbial Physiology	
MBIO A451	Microbial Biotechnology	
MBIO A452	Microbial Genetics	
MBIO A462	Virology	
PHYS A303	Modern Physics	
PHYS A320	Simulation of Physical Systems	
PHYS A403	Quantum Mechanics	
PSY A370	Behavioral Neuroscience	

A minimum of 120 credits is required for the degree, of which 42 credits must be upper division.

Chemistry Option - Admission Suspended

Contact the Chemistry Department for advising concerning this degree option.

Honors in Chemistry

The Department of Chemistry awards departmental honors in chemistry to undergraduate students who show exceptional performance in all their coursework. To graduate with honors students must:

1. Satisfy all requirements for a Bachelor of Science in Chemistry.
2. Meet the requirements for Graduation with Honors (p. 38).
3. Maintain a minimum GPA of 3.50 in CHEM classes.
4. Complete, with distinction, a written assignment in the style of a chemical journal based on the research performed in CHEM A498.
5. Notify the Departmental Honors Committee in writing at the time they file their Application for Graduation with the Office of the Registrar that they intend to graduate with departmental honors.

Program Student Learning Outcomes

/programadmin/57/index.html

Digital Art

Kenai Peninsula College

156 College Road, Soldotna, AK 99669, (907) 262-0300, (877) 262-0330

www.kpc.alaska.edu (<http://www.kpc.alaska.edu>)

Advising for this program is only available from faculty at Kenai Peninsula College. Please call (907) 262-0359 or (877) 262-0330 for more information.

The Associate of Applied Science in Digital Art is currently suspended. Please contact Kenai Peninsula College for more information.

Program of Study

Associate of Applied Science

- AAS in Digital Art (p. 119)

Faculty

Celia Anderson, Associate Professor, IFCRA@alaska.edu

Jayne Jones, Assistant Professor, IFJMJ@alaska.edu

Associate of Applied Science in Digital Art

Admission to this program is currently suspended. Contact Kenai Peninsula College for more information.

English

Administration/Humanities Building (ADM), Room 101, (907) 786-4355

www.uaa.alaska.edu/english (<http://www.uaa.alaska.edu/english>)

The programs offered by the Department of English provide an opportunity for a truly liberal education, one that encourages both self-discovery and an exploration of enduring ideas. The curriculum includes courses in composition, rhetoric, linguistics and literature.

The English Department's mission is to prepare students to succeed in an increasingly diverse world. The department is devoted to an innovative curriculum that encourages lifelong learning, critical thinking and effective writing. We teach students to see textual work as an engagement with history, convention, culture and place so that they can participate responsibly in changing regional and challenging global environments. In particular, the department is concerned with Alaskan cultures, the North Pacific Rim environment and the intersection of networked technologies and forms of textuality. The English Department also strives to familiarize students with a full range of literacies – written, digital and visual – so that they may become active and well-equipped citizens.

To address this mission, the department offers three emphases in the undergraduate major: literature, rhetoric and language, and secondary education.

- The literature option focuses on significant examples of literature from different places, periods, and genres as well as the social and geocultural forces that shape them.
- The rhetoric and language option focuses on rhetorical strategies and techniques of composition, emphasizing historical, theoretical and linguistic perspectives.
- The secondary education option prepares students for teaching literature and writing at the middle and high school levels as well as for admission to UAA's Master of Arts in Teaching program.

The department also provides minors in English and creative writing. The Minor in English with the literature option enhances the experience of students majoring in other subjects by providing a study of significant authors and literary works as well as by developing skills in writing and critical analysis. The Minor in English with the professional writing option prepares students to interpret and present complex information in a readable form to various audiences using a variety of media. The Minor in English with the linguistics option is designed for non-English majors who wish to build a foundation in linguistic studies for complementary majors, such as anthropology and languages, and for those who are interested in the study and teaching of languages. The Minor in Creative Writing and Literary Arts allows students to explore the crafts of fiction, literary nonfiction, poetry, and dramatic writing in an intensive series of workshops taught by active writers in the genres.

For information on English placement tests, transfer credits, petition procedures, or special registration, contact the English Department (<http://www.uaa.alaska.edu/english>).

Programs of Study

Bachelor of Arts

- BA in English (p. 120)

Minors

- Minor in Creative Writing and Literary Arts (p. 122)
- Minor in English (p. 122)

Faculty

David Bowie, Associate Professor, david.bowie@alaska.edu
 Jeane T'áaw xíwaa Breinig, Professor, jmbreinig@alaska.edu
 Jacqueline Cason, Associate Professor, jecason@alaska.edu
 Clare Dannenberg, Associate Professor, cjdannenberg@alaska.edu
 Sharon Emmerichs, Assistant Professor, semmerichs@alaska.edu
 Patricia Jenkins, Associate Professor, pmjenkins@alaska.edu
 Daniel Kline, Professor, dtkline@alaska.edu
 Patricia Linton, Professor, pwlinton@alaska.edu
 Emily Madsen, Assistant Professor, emadsen6@alaska.edu

Sherry Simpson, Professor, sasimpson@alaska.edu
 Ronald Spatz, Professor, rmspatz@alaska.edu
 David Stevenson, Professor, ddstevenson@alaska.edu
 (ddstevenson@alaska.edu)
 Jennifer Stone, Professor, jstone32@alaska.edu
 Jervette Ward, Associate Professor, jward68@alaska.edu
 Toby Widdicombe, Professor, rtwiddicombe@alaska.edu

Bachelor of Arts in English

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Degrees (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the major requirements below.

Major Requirements

Students working toward a degree in English may choose from three options: Literature; Writing, Rhetoric, Linguistics, and Literacies; or Secondary Education.

Code	Title	Credits
Core Courses		
ENGL A201	Masterpieces of World Literature I	3
ENGL A202	Masterpieces of World Literature II	3
ENGL A414	Research Writing	3
ENGL A433	Literacy, Rhetoric and Social Practice	3
ENGL A435	Critical Theory	3
ENGL A476	History of English Language	3
Complete one of the following options: Literature; Writing, Rhetoric, Linguistics, and Literacies; or Secondary Education		24

Literature Option

Code	Title	Credits
National Literature		
Complete 3 credits from the following:		3
ENGL A301	Literature of Britain I	
ENGL A302	Literature of Britain II	
ENGL A306	Literature of the United States I	
ENGL A307	Literature of the United States II	
ENGL A309	Texts of American Cultures and Regions	
Period Courses		
Complete 3 credits from one period and 6 credits from the other period:		9
Earlier		
ENGL A310	Ancient Literature	
ENGL A315	Survey of Medieval Literature	
ENGL A320	Renaissance Literature	
ENGL A325	Neoclassical Literature	
Later		
ENGL A330	Literature of Romanticism	
ENGL A340	The Victorian Period	
ENGL A343	Modern and Contemporary Literature	
ENGL A440	Topics in Comparative Literature	

Genre

Complete 3 credits from the following:		3
ENGL A351	Poetry	
ENGL A361	The Novel	
ENGL A363	Short Story	
ENGL A371	Narrative Nonfiction	
ENGL A381	Drama	
ENGL A383	Film Interpretation	
ENGL A391	Genres of Subject and Theme	

Specialized Studies

Complete 6 credits from the following:		6
ENGL A424	Shakespeare	
and one of the following:		
ENGL A404	Topics in Women's Literature	
ENGL A429	Major Authors	
ENGL A444	Topics in Native Literatures	
ENGL A445	Alaska Native Literatures	
ENGL A490	Topics in English Studies	
Complete 3 credits of upper-division ENGL electives		3
Total Credits		24

Studies in Writing, Rhetoric, Linguistics, and Literacies Option

Code	Title	Credits
Disciplinary Foundations		
Complete all three courses from the following:		

LING A201	How English Works	3
ENGL A434	Rhetoric and Composition Research Theories and Methodologies	3
ENGL A483	Composition, Literacy and the Teaching of Writing	3

Professional Practice

Complete 2 courses from the following:		6
ENGL A312	Advanced Technical Writing	
ENGL A313	Professional Writing	
ENGL A450	Linguistics and English Language Teaching	
ENGL A487	Professional Editing	
ENGL A495	Internship in Professional Writing	

Civic Awareness and Participation

Complete 2 courses from the following:		6
ENGL A311	Writing and Rhetoric in Public Life	
ENGL A474	Sociolinguistics	
ENGL A478	Public Science Writing	
ENGL A490	Topics in English Studies	
LING A101	How Language Works	

Upper-Division Electives

Complete 1 upper-division ENGL course		3
Total Credits		24

Secondary Education Option

Code	Title	Credits
Reading and Literature		
ENGL A424	Shakespeare	3
Complete one of the following or an approved upper- division ENGL literature or creative writing course:		3
ENGL A309	Texts of American Cultures and Regions	
ENGL A343	Modern and Contemporary Literature	
ENGL A404	Topics in Women's Literature	
ENGL A440	Topics in Comparative Literature	
ENGL A444	Topics in Native Literatures	
ENGL A445	Alaska Native Literatures	
Complete one of the following:		3
ENGL A306	Literature of the United States I	
ENGL A307	Literature of the United States II	
Complete one of the following:		3
ENGL A351	Poetry	
ENGL A361	The Novel	
ENGL A363	Short Story	
ENGL A371	Narrative Nonfiction	
ENGL A381	Drama	
ENGL A383	Film Interpretation	
ENGL A391	Genres of Subject and Theme	

Language and Composition

Complete 3 credits from the following:		3
ENGL A311	Writing and Rhetoric in Public Life	
ENGL A312	Advanced Technical Writing	
ENGL A313	Professional Writing	
Complete one of the following:		3
LING A101	How Language Works	
LING A201	How English Works	
ENGL A450	Linguistics and English Language Teaching	3
ENGL A474	Sociolinguistics	3
Total Credits		24

A total of 120 credits is required for the degree, of which 42 credits must be upper division.

Honors in English

The Department of English recognizes exceptional undergraduate students by awarding them departmental honors in English. To graduate with departmental honors, the student must be a declared English major, satisfy all requirements for a BA in English (Literature; Writing, Rhetoric, Linguistics, and Literacies; or Secondary Education option), and fulfill the following:

1. Meet the requirements for Graduation with Honors (p. 38).
2. Maintain a GPA of 3.50 in all courses in the English major.
3. Complete 6 credits of the following 400-level topics courses with a grade of A:

Code	Title	Credits
ENGL A429	Major Authors	
ENGL A440	Topics in Comparative Literature	
ENGL A444	Topics in Native Literatures	
ENGL A490	Topics in English Studies	

4. Complete ENGL A499 with a grade of A.

The honors thesis itself is shaped by these guidelines:

- A student wishing to take ENGL A499 should coordinate the process from the beginning with two faculty members (one considered primary, one secondary), one of whom must be a full-time tenure-track member of the English Department.
- The secondary faculty member may be from another department with the approval of the primary faculty member. Both faculty members should be involved in the project from early in the process.
- The student is responsible for locating the two faculty members and securing their agreement to become involved in the project.
- The student should meet regularly (about once every couple of weeks) with the primary faculty member guiding the thesis to ensure that the project remains on track.
- The student may well benefit from concurrent enrollment in ENGL A414.

- The process should begin with a proposal of no more than 1,000 words (statement of purpose, preliminary controlling generalization and outline) along with an annotated bibliography of about 10 items. This proposal needs to be approved by both faculty members before the student may proceed to write the honors thesis itself.
- The anticipated length of the project is 7,500-10,000 words (exclusive of reference page[s]).
- The final paper needs to be submitted to the two faculty members by the end of the last week of instruction of the semester during which the student is enrolled in ENGL A499.
- The project should be undertaken in a student's senior year.
- Successful completion of ENGL A499 (with success defined as an A for the honors thesis) may be used to count for 3 credits toward the 7 credit requirement of the honors senior project.

Program Student Learning Outcomes

All options prepare majors to conduct research in the discipline and to write for a variety of purposes and audiences. In addition, each option offers the opportunity to earn honors in English. The specific student learning outcomes that support the undergraduate program objectives are to produce graduates who are able to:

- Read closely.
- Interpret texts analytically.
- Conduct research effectively.
- Weigh evidence critically.
- Write coherently.

Minor in Creative Writing and Literary Arts

Students who wish to minor in creative writing must complete the following requirements:

Code	Title	Credits
ENGL A260	Introduction to Creative Writing	3
ENGL A385	Creative Writing Workshop	3
Repeat one of the above for three (3) additional credits.		3
Select one of the following courses in literature:		3
ENGL A351	Poetry	
ENGL A361	The Novel	
ENGL A363	Short Story	
ENGL A371	Narrative Nonfiction	
ENGL A381	Drama	
ENGL A383	Film Interpretation	
ENGL A391	Genres of Subject and Theme	
ENGL A429	Major Authors	
Select one of the following courses in rhetoric and linguistics:		3
ENGL A433	Literacy, Rhetoric and Social Practice	
ENGL A474	Sociolinguistics	

ENGL A487	Professional Editing	
ENGL A495	Internship in Professional Writing	
Complete one additional course from the lists of courses in literature, rhetoric, and linguistics above.		3
Students may apply ENGL A490 Topics in English Studies to the appropriate list above, depending on subject coverage with advisor approval.		
Students may replace 3 credits of the minor with ENGL A498 Individual Research or ENGL A499 English Honors Thesis if the project is a creative work.		
Total Credits		18

A total of 18 credits is required for the minor.

Minor in English

The Department of English offers a Minor in English with emphases in literature, linguistics or professional writing.

Students majoring in another subject who wish to minor in English must complete requirements for one of the following emphases.

Linguistics Emphasis

Code	Title	Credits
LING A101	How Language Works	3
LING A201	How English Works	3
Complete 12 credits from the following:		12
ANTH A210	Linguistic Anthropology	
ENGL A450	Linguistics and English Language Teaching	
ENGL A474	Sociolinguistics	
ENGL A476	History of English Language	
ENGL A487	Professional Editing	
ENGL A490	Topics in English Studies	
Total Credits		18

Literature Emphasis

Code	Title	Credits
ENGL A201	Masterpieces of World Literature I	3
ENGL A202	Masterpieces of World Literature II	3
ENGL A351	Poetry	3
ENGL A424	Shakespeare	3
ENGL A435	Critical Theory	3
Upper division English elective		3
Total Credits		18

Professional Writing Emphasis

Code	Title	Credits
Select one of the following:		3
WRTG A212	Writing and the Professions	
WRTG A213	Writing and the Sciences	
WRTG A214	Arguing Across Contexts	

Select two of the following: 6

ENGL A311	Writing and Rhetoric in Public Life
ENGL A312	Advanced Technical Writing
ENGL A313	Professional Writing

Select one of the following: 3

ENGL A414	Research Writing
ENGL A483	Composition, Literacy and the Teaching of Writing
ENGL A487	Professional Editing
ENGL A495	Internship in Professional Writing

And both of the following: 6

ENGL A433	Literacy, Rhetoric and Social Practice
Upper division elective approved by the English Department	

Total Credits 18

A total of 18 credits is required for the minor.

Environment and Society

Beatrice McDonald Hall (BMH), Room 231, (907) 786-1665
www.uaa.alaska.edu/ges (<http://www.uaa.alaska.edu/ges>)

The B.S. in Environment and Society is designed to prepare Alaskans and others for careers in environmental assessment, planning, policy, conservation, education and advocacy, as well as further graduate studies.

Students are exposed to a range of interdisciplinary studies, but the program focuses on giving students the key methods, tools and knowledge they will need to engage as professionals in order to make informed decisions about environmental issues and guide the responsible development of our natural resources in the State of Alaska and beyond.

Students follow a course of study that introduces them to environmental sciences and studies, economics, and ethics. Students study field methods in the discipline, geographic information systems, conservation biology, civic engagement and public science writing. Students are also required to complete two professional development courses, an internship, and a capstone course in environmental assessment and planning.

In addition, all students must complete one concentration outside of the field that gives them a specialization beyond professional training in environmental studies. Concentrations include one in the biological sciences, which focuses on ecosystems and ecology; one in geological sciences, focused on environmental geology; a social science concentration, drawing on courses in anthropology and sociology; and spatial concentration, which allows students to build advanced skills in geographic information systems.

Programs of Study

Bachelor of Arts

- BA in Environment and Society (p. 123)

Bachelor of Science

- BS in Environment and Society (p. 123)

Minors

- Minor in Environmental Studies (p. 125)

Faculty

Geography and Environmental Studies Faculty

Shannon Donovan, Associate Professor, smdonovan@alaska.edu
Audrey Taylor, Assistant Professor, artaylor@alaska.edu
Dorn Van Dommelen, Professor, dvandommelen@alaska.edu

Affiliated Faculty

Raymond Anthony, Associate Professor, Philosophy, rxanthony@alaska.edu
Jackie Cason, Associate Professor, English, jecason@alaska.edu
Judith Owens-Manley, Associate Professor, School of Social Work, jowensmanley@alaska.edu

Bachelor of Arts in Environment and Society

Admission to this program is currently suspended. Contact the College of Arts and Sciences for more information.

Bachelor of Science in Environment and Society

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86). Some major requirements may be used to satisfy General Education Requirements.
- Complete the College of Arts and Sciences Requirements (p.).
- Complete the major requirements below.

Major Requirements

Code	Title	Credits
BIOL A271	Principles of Ecology	3
BIOL A473	Conservation Biology	3
CEL A292	Introduction to Civic Engagement	3

COMM A241	Public Speaking	3
ECON A210	Environmental Economics and Policy	3
ENGL A478	Public Science Writing	3
ENVI A211 & A211L	Environmental Science: Systems and Processes and Environmental Science: Systems and Processes Laboratory	4
ENVI A212	Living on Earth: Introduction to Environmental Studies	3
ENVI A280	Professional Preparation in Environmental Fields I	1
ENVI A370	Environmental Field Methods	3
ENVI A395	Environmental Studies Internship	3
ENVI A470	Environmental Planning and Problem Solving	4
ENVI A480	Professional Preparation in Environmental Fields II	1
ENVI A490	Topics in Environment and Society	3
GEOG/ENVI A111	Earth Systems: Elements of Physical Geography	3
GEOG A375	Environmental Applications of Geographic Information Systems (GIS)	3
WRTG A212 or WRTG A213	Writing and the Professions Writing and the Sciences	3
Complete one of the following 100-level math options: *		3-7
MATH A121	College Algebra for Managerial and Social Sciences	
MATH A151 & MATH A152	College Algebra for Calculus and Trigonometry	
MATH A155	Precalculus	
MATH A221 or MATH A251	Applied Calculus for Managerial and Social Sciences Calculus I	3-4
PHIL A303	Environmental Ethics	3
STAT A253	Applied Statistics for the Sciences	4
Total Credits		62-67

* Students planning on taking the Spatial Concentration below should not take MATH A121 to fulfill this requirement. Fulfilling this requirement with MATH A121 might require additional prerequisites when completing the spatial concentration.

Complete one of the following concentrations:

Code	Title	Credits
Biology Concentration		
BIOL A108	Principles and Methods in Biology	6
CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	4

CHEM A106	General Chemistry II	3
Complete 9 credits from the following upper-division courses:		9
BIOL A431	Plant Diversity and Evolution	
BIOL A467	Wildlife Population Dynamics and Management	
BIOL A472	Biogeography	
BIOL A474	Ecotoxicology	
BIOL A477	Tundra and Taiga Ecosystems	
BIOL A478	Biological Oceanography	
BIOL A481	Marine Biology	
BIOL A482	Spatial Ecology	
BIOL A483	Exploration Ecology	
BIOL A484	Experiential Learning: Exploration Ecology Field Study	
Total Credits		22

Code	Title	Credits
Geology Concentration		
BIOL A102	Introductory Biology	3
CHEM A103	Introduction to General Chemistry	3
Complete one of the following:		4
GEOL A111 & A111L	Physical Geology and Physical Geology Laboratory	
GEOL A121	Physical Geology for Science and Engineering Majors	
GEOL A221	Historical Geology	4
Complete 10 credits of the following with at least 6 credits from upper-division courses:		10
BIOL/GEOL A178	Fundamentals of Oceanography	
BIOL/GEOL A179	Fundamentals of Oceanography Laboratory	
GEOL A115	Environmental Geology	
GEOL A115L	Environmental Geology Laboratory	
GEOL A345	Hydrogeology	
GEOL A350	Geomorphology	
GEOL A361	Earth Resources and Society	
GEOL A445	Geothermal Energy	
GEOL A454	Glacial and Quaternary Geology	
GEOL A455	Permafrost	
GEOL A456	Geoarchaeology	
GEOL A490	Advanced Topics in Geology (with environmental topic)	
Total Credits		24

Code	Title	Credits
Social Science Concentration		
BIOL A102	Introductory Biology	3
CHEM A103	Introduction to General Chemistry	3

Complete 6 credits from the following: 6

ANTH A202 Cultural Anthropology

ANTH A211 Archaeology

SOC A101 Introduction to Sociology

Complete 9 credits from the following upper-division courses: 9

ANTH A415 Applied Anthropology

ANTH A431 Field Methods in Archaeology and Bioanthropology

ANTH A454 Culture and Ecology

GEO A354 City and Regional Planning

PS/SOC A361 Social Science Research Methods

SOC A307 Demography

SOC A309 Urban Sociology

SOC A404 Environmental Sociology

SOC A462 Social Science Statistics

Complete one additional course from any of the courses listed in this concentration. 3

Total Credits 24

Code	Title	Credits
Spatial Concentration		
BIOL A102	Introductory Biology	3
CHEM A103	Introduction to General Chemistry	3
GIS A101	Introduction to Geographic Information Systems	3
GIS A201	Intermediate Geographic Information Systems	3
Complete 9 credits from the following upper-division courses: 9		
GIS A301	Spatial Data Structures	
GIS A351	Remote Sensing	
GIS A370	GIS and Remote Sensing for Natural Resources	
GIS A458	Spatial Data Management	
GIS A466	Spatial Analysis	
Total Credits		21

BIOL A102 Introductory Biology 3

CHEM A103 Introduction to General Chemistry 3

GIS A101 Introduction to Geographic Information Systems 3

GIS A201 Intermediate Geographic Information Systems 3

Complete 9 credits from the following upper-division courses: 9

GIS A301 Spatial Data Structures

GIS A351 Remote Sensing

GIS A370 GIS and Remote Sensing for Natural Resources

GIS A458 Spatial Data Management

GIS A466 Spatial Analysis

Total Credits 21

A total of 120 credits is required for the degree, of which 42 credits must be upper-division.

Program Student Learning Outcomes

Students graduating with a Bachelor of Science in Environment and Society will be able to:

- Explain the fundamental role of natural/living systems in supporting life and social well-being, enabling beneficial relationships between people and the natural world, and underpinning the key human threats to the environment.
- Demonstrate the ability to employ the following liberal education skills in a disciplinary and professional setting: critical thinking, problem solving, and decision making; conceptual engagement with

ethics and civic issues; use of the scientific method; and technical writing skills.

- Apply the following skill sets to address environmental problems and develop solutions in professional, academic, and civic settings: communication and teamwork, stakeholder engagement, field research techniques, environmental assessment, survey design, data collection and analysis, mapping techniques, knowledge of key environmental laws and policies, environmental planning.

Minor in Environmental Studies

Students majoring in another subject who wish to minor in environmental studies must complete the following requirements:

Code	Title	Credits
ENVI A211	Environmental Science: Systems and Processes	3
ENVI A211L	Environmental Science: Systems and Processes Laboratory	1
ENVI A212	Living on Earth: Introduction to Environmental Studies	3
ENVI A370	Environmental Field Methods	3
ENVI A470	Environmental Planning and Problem Solving	4
Complete two of the following courses:		6
ANTH A454	Culture and Ecology	
BIOL A473	Conservation Biology	
ECON A210	Environmental Economics and Policy	
ENGL A478	Public Science Writing	
ENVI A395	Environmental Studies Internship	
ENVI A490	Topics in Environment and Society	
GEOG A375	Environmental Applications of Geographic Information Systems (GIS)	
PHIL A303	Environmental Ethics	
SOC A404	Environmental Sociology	
Total Credits		20

ENVI A211L Environmental Science: Systems and Processes Laboratory 1

ENVI A212 Living on Earth: Introduction to Environmental Studies 3

ENVI A370 Environmental Field Methods 3

ENVI A470 Environmental Planning and Problem Solving 4

Complete two of the following courses: 6

ANTH A454 Culture and Ecology

BIOL A473 Conservation Biology

ECON A210 Environmental Economics and Policy

ENGL A478 Public Science Writing

ENVI A395 Environmental Studies Internship

ENVI A490 Topics in Environment and Society

GEOG A375 Environmental Applications of Geographic Information Systems (GIS)

PHIL A303 Environmental Ethics

SOC A404 Environmental Sociology

Total Credits 20

A minimum of 20 credits is required for the minor.

Program Student Learning Outcomes

The specific educational outcomes that support the program objectives are to produce graduates who are able to:

- Explain the fundamental role of natural/living systems in supporting life and social well-being, the relationships between people and the natural world, and the key human threats to the environment.
- Apply skill sets such as Geographic Information Systems, knowledge of the National Environmental Policy Act and survey design to address environmental problems and develop solutions in professional, academic and civic settings

Geological Sciences

ConocoPhillips Integrated Sciences Building (CPSB), Room 101,
(907) 786-1298, uaa_geosciences@alaska.edu
www.uaa.alaska.edu/geology (<http://www.uaa.alaska.edu/geology>)

Geology is the science that studies planet Earth. The geological sciences incorporate areas of study in:

- Earth materials including mineralogy, petrology, sedimentology and stratigraphy, volcanology, ore deposits, and structure.
- Geologic Earth history including historical geology and paleontology.
- Earth surface processes including geomorphology, paleoclimatology, glacial geology, and permafrost.
- Earth's environmental systems including hydrogeology, environmental geochemistry, and geophysics.

The curriculum is designed to provide students with a solid understanding of the geological sciences to prepare them for graduate studies, government and industry employment, and teaching. A Bachelor of Science in Geological Sciences is available for undergraduates.

The geological sciences faculty are highly motivated to transmit their knowledge and passion for the geological sciences and focus on combining classroom education with laboratory and fieldwork. Students who enjoy working outdoors, have a strong scientific background and are interested in earth processes will find the geological sciences a rewarding area of study.

The program requires completion of a basic science curriculum in chemical, physical, and mathematical sciences in addition to core and elective courses in geological sciences. The undergraduate degree in geology also offers a special track in environmental geology. This track requires core geology courses plus upper-division electives that focus on environmental topics including environmental geochemistry and hydrogeology. Students are strongly encouraged to consult with geological sciences faculty to choose the direction of study suiting their goals.

The Bachelor of Science in Geological Sciences program can be completed in four years by students who have adequate high school preparation in the sciences and math. Consult the College of Arts and Sciences list of recommended preparatory courses (p. 98) in all disciplines.

Programs of Study

Bachelor of Science

- BS in Geological Sciences (p. 126)

Faculty

Jennifer Aschoff, Associate Professor, jaschoff@alaska.edu

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Kristine Crossen, Emerita Professor, kjcrossen@alaska.edu

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Anne Pasch, Emerita Professor, ahadp@alaska.edu

Erin Shea, Assistant Professor, eshea2@alaska.edu

Bachelor of Science in Geological Sciences

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Academic Requirements

In order to graduate with a BS in Geological Sciences, all courses listed as major requirements must be completed with a minimum grade of C. Students who audit a GEOL course or who are unable to earn a minimum grade of C in the course may repeat the course. All prerequisites for GEOL courses must be completed with a minimum grade of C.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the major requirements below.

Major Requirements

Code	Title	Credits
Support Courses		
CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	4
CHEM A106 & A106L	General Chemistry II and General Chemistry II Laboratory	4
MATH A251	Calculus I *	4
PHYS A123 & A123L	College Physics I and College Physics I Laboratory	4
PHYS A124 & A124L	College Physics II and College Physics II Laboratory	4
Core Courses		
GEOL A121	Physical Geology for Science and Engineering Majors	4
or GEOL A111 & A111L	Physical Geology and Physical Geology Laboratory	
or GEOL A115 & A115L	Environmental Geology and Environmental Geology Laboratory	
GEOL A221	Historical Geology	4
GEOL A225	Earth Surface Processes	3
GEOL A310	Professional Practices in Geology	3

GEOL A315	Geological Data Visualization and Analysis	3
GEOL A321	Mineralogy	4
GEOL A322	Igneous and Metamorphic Petrology	4
GEOL A331	Sedimentology and Stratigraphy	3
GEOL A332	Sedimentary Petrology Laboratory	1
GEOL A335	Structural Geology	4
GEOL A345	Hydrogeology	3
GEOL A461	Geochemistry	3
GEOL A476	Applied Geophysics	3
Complete 6 credits from the following:		6
GEOL A480	Geologic Field Methods	
GEOL A481	Alaskan Field Investigations	
or GEOL A482	Geologic Field Investigations	
Geology field camp **		
Electives		
Complete 12 credits from the following:		12
GEOL A320	Volcanology	
GEOL A325	Geology of Ore Deposits	
GEOL A350	Geomorphology	
GEOL A361	Earth Resources and Society	
GEOL A380	Anchorage Field Studies	
GEOL A381	Kenai Peninsula Field Studies	
GEOL A382	Geologic Field Studies	
GEOL A426	Mineral Resources	
GEOL A436	Petroleum Geology	
GEOL A437	Depositional Systems and Dynamic Stratigraphy	
GEOL A438	Advanced Sedimentary Petrology	
GEOL A445	Geothermal Energy	
GEOL A448	Structural Geology and Geomechanics	
GEOL A454	Glacial and Quaternary Geology	
GEOL A455	Permafrost	
GEOL A456	Geoarchaeology	
GEOL A458	Geology of Alaska	
GEOL A463	Environmental Geochemistry	
GEOL A465	Isotope Geochemistry	
GEOL A477	Integrated Subsurface Mapping and Analysis	
GEOL A480	Geologic Field Methods ***	
GEOL A481	Alaskan Field Investigations ***	
GEOL A482	Geologic Field Investigations	
GEOL A490	Advanced Topics in Geology	
GEOL A492	Geology Seminar	
GEOL A495	Geology Internship	
GEOL A498	Student Research	

GEOL A499	Senior Thesis
Total Credits	80

* Additionally, MATH A252 is highly recommended for students majoring in geological sciences.

** Geology field camps offered through other accredited academic institutions must be approved by the Department of Geological Sciences. Credits must be transferable to UAA from the academic institution that is offering the course and must be completed with a minimum grade of 2.00.

*** GEOL A480 and GEOL A481 may be applied toward recommended electives if they are not being applied to satisfy core requirements.

Code	Title	Credits
Environmental Geological Track		
Students wishing to receive a degree with an environmental geological sciences track should complete the above electives requirement with the following courses:		
Complete 12 credits from the following:		12
GEOL A350	Geomorphology	
GEOL A361	Earth Resources and Society	
GEOL A436	Petroleum Geology	
GEOL A445	Geothermal Energy	
GEOL A448	Structural Geology and Geomechanics	
GEOL A454	Glacial and Quaternary Geology	
GEOL A455	Permafrost	
GEOL A458	Geology of Alaska	
GEOL A463	Environmental Geochemistry	
GEOL A465	Isotope Geochemistry	
GEOL A495	Geology Internship	
Total Credits		12

A minimum of 120 credits is required for the degree, of which 42 must be upper-division credits.

Honors in Geological Sciences

The Department of Geological Sciences offers recognition to students who demonstrate exceptional promise in the science by awarding them with departmental honors in geological sciences. To graduate with departmental honors, the student must be a declared geological sciences major and meet the following requirements:

1. Satisfy all requirements for a BS in Geological Sciences.
2. Maintain a cumulative GPA of 3.50.
3. Complete 6 credits of GEOL A499, or 3 credits of GEOL A498 and 3 credits of GEOL A499, with a minimum grade of B.
4. Students intending to graduate with departmental honors must notify the departmental honors committee in writing on or before the date they file their Application for Graduation with the Office of the Registrar.

Program Student Learning Outcomes

The curriculum of the UAA Geological Sciences program is designed to produce graduates who:

- Have a basic knowledge of the principles related to the geological sciences with either an emphasis in environmental geology or general geology.
- Have an understanding of how to think scientifically and apply their knowledge to solve geologic problems.
- Have sufficient competence to obtain employment as an entry-level geologist or environmental geologist, and be able to progress professionally within the discipline and are prepared for advanced study.
- Have a fundamental understanding of Alaskan geology and environmental problems in Alaska.
- Are able to communicate their ideas.
- Are prepared for and understand the need for continued professional development throughout their careers.

In keeping with the objectives, it is expected that graduates of the UAA Geological Sciences program will have:

- An ability to apply their knowledge of general geology and/or environmental geology.
- An ability to accept challenges and think through problems until they are solved.
- An ability to design and conduct projects that include field work, laboratory analyses and interpretation in their area of emphasis.
- Experience in field geology in Alaska.
- An ability to communicate effectively.
- A recognition of the need for, and ability to pursue, lifelong learning.

History

Administration/Humanities Building (ADM), Room 147, (907) 786-1539

www.uaa.alaska.edu/history (<http://www.uaa.alaska.edu/history>)

History as a subject in its broadest sense is all that human beings have thought and done. Knowledge of history is the principal means by which humans discover and preserve their collective identity, for through such knowledge we gain a clear view of our limitations and a glimpse of our potential.

History as an intellectual discipline examines and interprets the documentary records of human activity, records that are often fragmentary and incomplete. As a discipline, history is both a science and an art; it requires an intricate balance of scientific technique and creative imagination to weave fragments of evidence into an intelligent account of human experience.

Programs of Study

Bachelor of Arts

- BA in History (p. 128)

Minor

- Minor in History (p. 129)

Faculty

Anchorage:

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Bachelor of Arts in History

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Graduation Requirements

1. Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
2. Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
3. Complete the College of Arts and Sciences Requirements (p.).
4. Complete the major requirements below.

Major Requirements

Code	Title	Credits
HIST A101	Western Civilization I	3
HIST A102	Western Civilization II	3
HIST A131	History of the United States I	3
HIST A132	History of the United States II	3
Complete 6 credits of the following non-Western history courses:		6
HIST A121	East Asian Civilization I	
HIST A122	East Asian Civilization II	
HIST A321	Modern China	
HIST A322	Modern Japan	
HIST/INTL/PS A325	Northeast Asia in 21st Century	
HIST A330	Russia in East Asia	
HIST A336	Latin America to 1800	
HIST A338	Modern Latin America	
HIST A390	Themes in World History *	
HIST A420	The Rise, Fall, and Reinvention of the Samurai	
HIST A422	"Communist" China	
Complete 15 credits of upper division History electives		15
HIST A377	Historiography: The Uses and Abuses of History	3
HIST A477	Senior Seminar	3

* May be repeated once with a change in subtitle.

A total of 120 credits is required for the degree, of which 42 credits must be upper division.

Honors in History

The award of honors in History recognizes distinguished achievement by undergraduate majors in the study and writing of history.

To be eligible for departmental honors a student must satisfy the following requirements:

1. Be a declared History major.
2. Satisfy all the requirements for a BA in History.
3. Meet the requirements for Graduation with Honors (p. 38).
4. Maintain a grade point average of 3.50 or above in courses specific to the History major.
5. Complete HIST A377 with a grade of A.
6. Complete HIST A477 paper with a grade of A.

Honors designees in History must submit a typographically correct, formal copy of their senior paper to the department for deposit in the departmental archives. This must be done before graduation day of the year in which the paper is completed.

Program Student Learning Outcomes

The desired student learning outcomes for the Department of History are:

- Demonstrate the ability to write clear and precise English.
- Demonstrate advanced level historical research skills (proper use of historical citation style, critical use of primary and secondary sources, adequate research base, ability to frame a good historical question).
- Demonstrate advanced historical skills (recognition of significance, cause and effect, continuity v. discontinuity, historiographical conversancy and perspective, critical and integrative thinking).

Minor in History

Students who wish to minor in history must complete the requirements listed below.

Code	Title	Credits
Complete one of the following sequences:		6
HIST A101 & HIST A102	Western Civilization I and Western Civilization II	
HIST A131 & HIST A132	History of the United States I and History of the United States II	
Upper-division History electives		9
History electives, any level		3
Total Credits		18

A total of 18 credits is required for the minor, 9 of which must be upper division.

International Studies

Fine Arts Building (ARTS), Room 332B, (907) 786-4841
www.uaa.alaska.edu/intl (<http://www.uaa.alaska.edu/intl>)

The international studies program prepares students to be global citizens in an interdependent world. International and intercultural knowledge is fundamental to contemporary life and work. The objective of this program is to prepare students to be contributing members of the international community.

The interdisciplinary Bachelor of Arts in International Studies provides students with analytical skills and cross-cultural insight required of informed global citizens. Foundational courses introduce students to different modes of inquiry and provide the basis for comparative approaches to international and global issues. The program of study requires students to apply analytical skills and modes of inquiry across regions, societies and cultures. Students select either a regional emphasis that focuses on a particular language and location or a global social science emphasis that prepares students broadly to pursue professional opportunities in an international context.

To further develop their understanding and skills, students majoring in international studies are encouraged to study abroad or participate in other international or intercultural experiences.

Students who complete a Bachelor of Arts in International Studies gain an understanding of the challenges and complexities of cross-cultural interactions in an increasingly interconnected world.

Programs of Study

Bachelor of Arts

- BA in International Studies (p. 130)

Minor

- Minor in International Studies (p. 132)

Faculty

Raymond Anthony, Professor of Philosophy, rxanthony@alaska.edu
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Bachelor of Arts in International Studies

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Degrees (p. 53).

Graduation Requirements

1. Complete the General University Requirements for Baccalaureate Degrees (p. 85).
2. Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
3. Complete the College of Arts and Sciences Requirements (p.).
4. Complete the major requirements below.

Major Requirements

Code	Title	Credits
Foundational Courses		
ENGL A202	Masterpieces of World Literature II	3
HIST A101	Western Civilization I	3
HIST A102	Western Civilization II	3
INTL/GEOG A101	Local Places/Global Regions: An Introduction to Geography	3
PS A102	Introduction to Political Science	3
SOC A101	Introduction to Sociology	3
Core Courses		
HIST A390	Themes in World History	3
PHIL A301	Ethics	3
PS A311	Comparative Politics	3
SOC A307	Demography	3
Mastery Courses		
Complete one of the following:		3
ENGL A440	Topics in Comparative Literature	
GEOG A390A	Topics in Global Geography	
PHIL A400	Ethics, Community, and Society	
SOC A380	Sociology of Globalization	
Choose an emphasis language from among the foreign languages offered at UAA and complete at least two semesters at the 200 level or higher. Students in the Regional Studies track must choose a language appropriate to one of the approved regions of study, as specified below.		8
Complete either the Regional Studies or Global Social Sciences track listed below.		12-15
Total Credits		53-56

Code	Title	Credits
Regional Studies Track		12-15
Europe (Languages: French, German, Russian, Spanish)		
Complete 12 upper-division credits in two subject areas:		12
FREN A310	Selected Topics: Literary Trends and Traditions ¹	
FREN A432	Selected Topics: Studies in French/Francophone Literature and Culture ¹	
GEOG A390B	Topics in Regional Geography ¹	

GER A310	Selected Topics: Literary Trends and Traditions ¹	
GER A432	Topics in Literatures and Cultures of the German-Speaking Countries ¹	
GER A490	Selected Topics in German Literature ¹	
HIST A314	Nineteenth Century Europe	
HIST A316	Twentieth Century Europe	
HIST A411	History of Modern Germany	
HIST A424	Imperial Russian History	
HIST A425	History of the Soviet Union	
HIST/RUSS A427	Post-Soviet Culture and Society	
HIST A486	Studies in Modern Europe	
PHIL A314	Western Religions	
PS A333	History of Political Philosophy II: Modern	
RUSS A390	Selected Topics in Advanced Russian ¹	
RUSS A490	Selected Topics in Russian Culture ¹	
SPAN A320	Studies in Contemporary Hispanic Cultures ¹	
SPAN A432	Selected Topics: Studies in Hispanic Literature and Culture ¹	
SPAN A490	Selected Topics: Hispanic Culture and Civilization ¹	
Northeast Asia (Languages: Chinese, Japanese)		
HIST A121	East Asian Civilization I	3
or HIST A122	East Asian Civilization II	
Complete 12 upper-division credits in two subject areas:		12
ART A360A	History of Non-Western Art I	
GEOG A390B	Topics in Regional Geography ¹	
HIST A321	Modern China	
HIST A322	Modern Japan	
HIST/INTL/PS A325	Northeast Asia in 21st Century	
HIST A330	Russia in East Asia	
JPN A350	Business Japanese	
JPN A390	Selected Topics: Studies in Japanese Culture and Society	
JPN A391	Selected Topics: English-Language Studies in Japanese Culture and Society	
JPN A490	Selected Topics: Studies in Japanese Literature and Culture	
PHIL A313	Eastern Philosophy and Religion	
PS A324	Model United Nations ¹	
The Global South (Languages: French, Spanish)		
Complete 12 upper-division credits in two subject areas:		12
ART A360B	History of Non-Western Art II	

FREN A310	Selected Topics: Literary Trends and Traditions ¹
FREN A432	Selected Topics: Studies in French/ Francophone Literature and Culture ¹
GEOG A390B	Topics in Regional Geography ¹
HIST A336	Latin America to 1800
HIST A338	Modern Latin America
HIST A408	Early Modern Iberia
HIST A479	Studies in Modern American History ¹
PHIL A314	Western Religions
PS A324	Model United Nations ¹
SPAN A310	Selected Topics: Literary Trends and Traditions ¹
SPAN A320	Studies in Contemporary Hispanic Cultures ¹
SPAN A390A	Selected Topics: Studies in Translation and Interpretation ¹
SPAN A432	Selected Topics: Studies in Hispanic Literature and Culture ¹
SPAN A490	Selected Topics: Hispanic Culture and Civilization ¹

Code	Title	Credits
Global Social Sciences Track		12
Complete 12 credits in two subject areas from the following:		
EDFN A304	Comparative Education	
GEOG A375	Environmental Applications of Geographic Information Systems (GIS)	
GEOG A390B	Topics in Regional Geography	
GEOG A490	Field Studies in Geography	
JUST A365	Comparative Justice Systems	
PS A301	Comparative Political Economy	
PS A321	International Relations	
PS A323	International Organizations	
PS A324	Model United Nations	
PS/SOC A361	Social Science Research Methods	
SOC A363	Social Stratification	
SOC A377	Sociology of Gender	

¹ With approved topic.

International/Intercultural Experience

International studies students are encouraged to engage in an international or intercultural experience related to their program of study and the student learning outcomes of the program. Students may earn credits applicable to the degree program through a study abroad program, short-term study abroad, or an internship or service-learning project that involves a significant international or intercultural component. Students seeking to fulfill a degree requirement with

credits earned through study abroad, internship or service-learning should consult an academic advisor and submit an academic petition in advance.

A total of 120 credits is required for the degree, of which 42 credits must be upper division.

Honors in International Studies

Students majoring in international studies are eligible to graduate with honors if they satisfy the following requirements:

1. Meet the requirements for Graduation with Honors (p. 38).
2. Meet the requirements for a Bachelor of Arts in International Studies.
3. Maintain a grade point average of 3.80 or above in courses applicable to the degree requirements.
4. Complete ENGL A440, GEOG A390A, PHIL A400, or SOC A380 with a grade of A.
5. Complete the 8-credit language requirement at the 300 level.

Program Student Learning Outcomes

Students graduating with a Bachelor of Arts in International Studies will be able to:

- Demonstrate cross-cultural understanding through language study.
- Demonstrate critical thinking about values, attitudes, and practices in an international context.
- Demonstrate an ability to analyze international issues and challenges and apply integrative multi-disciplinary tools to describe and explain them.
- Demonstrate effective written communication.

Minor in International Studies

Students wishing to minor in international studies must complete the following requirements.

Code	Title	Credits
INTL/GEOG A101	Local Places/Global Regions: An Introduction to Geography	3
Complete one the following (outside student's major):		3
GEOG A390A	Topics in Global Geography	
HIST A390	Themes in World History	
SOC A380	Sociology of Globalization	
Complete 8 credits in one of the following languages: Chinese, French, German, Japanese, Russian or Spanish		8
Complete two approved upper-division courses with regionally or thematically related international content*		6
Total Credits		20

* Departmental pre-approval required.

A total of 20 credits is required for the minor.

Program Student Learning Outcomes

Students graduating with a Minor in International Studies will be able to:

- Demonstrate cross-cultural understanding through language study.
- Demonstrate an understanding of international issues and challenges.

Journalism and Communication

Professional Studies Building (PSB), Room 203, (907) 786-1665
www.uaa.alaska.edu/journalismandcommunication (<http://www.uaa.alaska.edu/journalismandcommunication>)

The Department of Journalism and Communication offers an undergraduate program leading to a Bachelor of Arts with concentrations in journalism and digital media or strategic communications.

The program in journalism and public communications is nationally accredited by the Accrediting Council on Education in Journalism and Mass Communications (ACEJMC). The department places great emphasis on preparing graduates for careers in professional communications and media industries.

Journalism and public communications courses examine the role of the media in society and explore contemporary social, ethical and legal issues related to journalism, professional communications and media industries. The program emphasizes broad scholarship in the liberal arts. This type of scholarship is essential for preparation in professional communications and media industries, which require journalists and communications practitioners to possess a wide range of knowledge and understand the role of free expression in global society.

Mission

The Department of Journalism and Communication prepares students for professional careers and graduate study. Through research, creative activities and community engagement, the department also strives to meet Alaska's communication needs. The department's goal is to contribute to the development of the economic and social environment of the state with an emphasis on the southcentral region served by the University of Alaska Anchorage.

The department aims to foster in its students a strong resolve to make the flow of news and communication more accurate, informative, complete, fair and ethical. To accomplish this goal, the department seeks to teach students theory, skills and ethical principles of journalism and communication that will endure as fundamentals in a rapidly changing world.

The department offers students a chance for involvement in a range of co-curricular opportunities. It houses the Seawolf Debate program, and advises student media outlets The Northern Light and KRUA radio. For information on Seawolf Debate, contact Professor Steve Johnson. For information on student media, contact Professor Paola Banchemo.

Programs of Study

Bachelor of Arts

- BA in Journalism and Public Communications (p. 133)

Minor

- Minor in Communication (p. 134)

Faculty

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Bachelor of Arts in Journalism and Public Communications

Admission Requirements

- Satisfy the Application and Admission Requirements for Baccalaureate Degrees (p. 53).
- Submit a Declared Major Form for department approval. Students are accepted into a BA in JPC with two concentrations: journalism and digital media or strategic communications.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- At least 72 credits must be completed outside the major.
- Complete the major requirements below.

Major Requirements

Code	Title	Credits
Core Courses		
JPC A201	Reporting and Writing News	3
JPC A202	First Amendment and Media Ethics	3
JPC A203	Writing and Producing Media	3
JPC A204	Media Literacy	3
Electives		
Select one of the following 200-level JPC courses:		3
JPC A211	Visual Literacy	

JPC A212	Editing in a Multimedia World	
JPC A213	Digital Imaging	
Select any 300-level JPC course.		3
Select any 400-level JPC course.		1-6
Integrative Capstone		3

JPC A403	Communications and Media Research	
JPC A492	JPC Capstone Seminar	

Concentration Area

Complete one of two concentrations: journalism and digital media or strategic communications.	18

Code	Title	Credits
Journalism and Digital Media Concentration		18
JPC A342	Photojournalism	
JPC A343	Radio News Reporting	
JPC A344	Television News Reporting	
JPC A345	Web Design	
JPC A382	Digital Audio Production	
JPC A383	TV Studio Production	
JPC A384	Digital Video Production	
JPC A385	Scriptwriting for Film and Television	
JPC A442	Multimedia Journalism	
JPC A443	Public Service Reporting	
JPC A445	Magazines	
JPC A482	TV Post-Production	
JPC A483	Motion Graphics and Animation	
JPC A484	Digital Film Production I	
JPC A486	Digital Film Production II	
JPC A490	Selected Topics in Journalism and Public Communications	
JPC A495	JPC Practica and Internships *	
JPC A497	Independent Study	

Code	Title	Credits
Strategic Communications Concentration		18
JPC A345	Web Design	
JPC A362	Principles of Strategic Communications	
JPC A363	Research Methods for Strategic Communications	
JPC A366	Planning and Writing for Strategic Communications	
JPC A368	Commercial Photography	
JPC A369	Design for Publications	
JPC A462	Corporate Communications	
JPC A463	Crisis Communications	
JPC A464	Development Communications	

JPC A465	Strategic Communications Campaigns
JPC A490	Selected Topics in Journalism and Public Communications
JPC A495	JPC Practica and Internships *
JPC A497	Independent Study

Code	Title	Credits
Interdisciplinary electives		3
Select one course from the following:		
AKNS A201	Alaska Native Perspectives	
CEL A292	Introduction to Civic Engagement	
BA A286	Entrepreneurship and Innovation	
BA A381	Consumer Behavior and Relationship Management	
BA A480	Marketing Media Analytics	
ECON A201	Principles of Macroeconomics	
ECON A202	Principles of Microeconomics	
WS A200	Introduction to Women's and Gender Studies	
PHIL A301	Ethics	
HIST A131	History of the United States I	
HIST A390	Themes in World History	
JUST A330	Justice and Society	
PHIL A305	Professional Ethics	
PS A301	Comparative Political Economy	
PS A324	Model United Nations	
PSY A375	Social Psychology	

* Only JPC juniors and seniors with a 3.00 GPA may enroll in JPC A495. JPC practica require an approved academic plan and the approval of the appropriate JPC media advisor or UAA-based workplace supervisor. JPC internships require the approval of the director of JPC internships.

A total of 120 credits is required for the degree, of which 42 credits must be upper-division.

Honors in Journalism and Public Communications

Students majoring in journalism and public communications are eligible to graduate with department honors if they satisfy all of the following requirements:

- Meet the requirements for a BA in Journalism and Public Communications.
- Maintain a grade point average of 3.50 in JPC courses.
- Complete JPC A403 or JPC A492 with a grade of A or B.

Program Student Learning Outcomes

Students graduating with a Bachelor of Arts in Journalism and Public Communications will be able to:

- Understand and apply the principles and laws of freedom of speech and press for the country in which the institution that invites ACEJMC is located, as well as receive instruction in and understand the range of systems of freedom of expression around the world, including the right to dissent, to monitor and criticize power, and to assemble and petition for redress of grievances;
- Demonstrate an understanding of the history and role of professionals and institutions in shaping communications;
- Demonstrate an understanding of gender, race, ethnicity, sexual orientation and, as appropriate, other forms of diversity in domestic society in relation to mass communications;
- Demonstrate an understanding of the diversity of peoples and cultures and of the significance and impact of mass communications in a global society;
- Understand concepts and apply theories in the use and presentation of images and information;
- Demonstrate an understanding of professional ethical principles and work ethically in pursuit of truth, accuracy, fairness and diversity;
- Think critically, creatively and independently;
- Conduct research and evaluate information by methods appropriate to the communications professions in which they work;
- Write correctly and clearly in forms and styles appropriate for the communications professions, audiences and purposes they serve;
- Critically evaluate their own work and that of others for accuracy and fairness, clarity, appropriate style and grammatical correctness;
- Apply basic numerical and statistical concepts.
- Apply current tools and technologies appropriate for the communications professions in which they work, and to understand the digital world.

Minor in Communication

The study of communication provides students with an understanding of how individuals create and interpret verbal and nonverbal messages. The Minor in Communication introduces students to communication theory and practical experience in particular areas of communication, for example interpersonal communication or public communication. The minor develops understanding and skills which are valuable in a variety of different majors and professions.

Students majoring in another subject who wish to minor in communication must complete the following requirements with a minimum grade of C in each course.

Code	Title	Credits
Select 6 credits from the following:		6
COMM A101	Introduction to Human Communication	
COMM A111	Fundamentals of Oral Communication *	
COMM A235	Small Group Communication *	
COMM A237	Interpersonal Communication *	
COMM A241	Public Speaking *	

Select 9 credits from the following:

9

COMM A236	Interviewing
COMM A305	Intercultural Communication
COMM A320	Argumentation and Debate
COMM A340	Nonverbal Communication
COMM A341	Advanced Public Speaking
COMM A345	Women and Communication
COMM A346	Oral Interpretation of Literature
COMM A360	Competitive Debating
COMM A370	Relational Communication
COMM A380	Theories of Human Communication
COMM A390	Selected Topics in Communication
COMM A410	Communication in Education
COMM A412	Persuasion
COMM A420	Family Communication
Complete 3 additional credits from either of the above lists.	
Total Credits	

3

18

* *Fulfills Oral Communication Skills General Education Requirement*

A total of 18 credits is required for the minor.

Languages

Administration/Humanities Building (ADM), Room 287
www.uaa.alaska.edu/languages (<http://www.uaa.alaska.edu/languages>)

Studying languages prepares a student to live and work in an increasingly interdependent world in which contact with other cultures is frequent and the appreciation and respect for linguistic and cultural diversity is important. The Department of Languages offers a Bachelor of Arts degree, a minor in a single language, and courses that fulfill CAS and GER requirements.

The Bachelor of Arts in Languages affords students the option of concentrating on one emphasis language (Option I), or of studying an emphasis language in combination with a second language (Option II). These options and the student's selection of courses from outside the department to fulfill major requirements, reflect the diverse context in which students live and work, and recognize the inherent multidisciplinary nature of language study. This flexibility also allows students to select a program most suited to their educational and career goals.

The Department of Languages offers French, German, Japanese, and Spanish as emphasis languages, with additional lower division courses in American Sign Language (ASL), Chinese, and Russian. First-year courses begin building the foundations of language learning: listening, speaking, reading, and writing. Since language can only be understood within a cultural context, studying culture is included from the first semester. In courses beyond the first year, students expand and refine their language skills and further develop their cultural knowledge.

As an integral part of their education, the department recommends that all students majoring in Languages study abroad in a country of

their target language(s). UAA offers a variety of opportunities for study abroad. For a full description of study abroad opportunities through UAA, students should refer to the International Study Abroad Coordinator in the Office of International and Intercultural Affairs. Students wishing to apply study abroad credit toward a Languages degree must petition to satisfy major and/or minor requirements with study abroad experience. The department may require post-program examinations. The department highly recommends that students discuss their study abroad plans with their academic advisor prior to participation.

Credit for Prerequisite Not Taken: Languages

An accepted degree-seeking UAA student who has completed one of the Department of Languages UAA catalog courses (A102-A301) in residence with a grade of C or higher is eligible to receive credit for the two immediately preceding courses, if any, up to a total of 8 credits, not to exceed the level of A202. Language Credit for Prerequisite Not Taken is limited to one time per language. This policy does not apply to credit earned through other nontraditional credit procedures, nor to special topics (-93), independent study (-97), the course A302, or Department of Languages literature or culture courses.

To receive this credit, students must submit the appropriate form to the Office of the Registrar and pay an administrative fee to have the credit applied to their transcript.

Programs of Study

Bachelor of Arts

- BA in Languages (p. 135)

Minor

- Minor in Languages (p. 136)

Faculty

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Bachelor of Arts in Languages

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Degrees (p. 53).

Academic Requirements

No course in which a grade below C has been received will count toward the major.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the College of Arts and Sciences Requirements (p.).
- Complete the major requirements below.

Major Requirements

Students working toward a degree in languages may choose from French, German, Japanese or Spanish.

Code	Title	Credits
Complete the following four courses in the primary language:		16
A201	Intermediate I *	
A202	Intermediate II *	
A301	Advanced I	
A302	Advanced II	
Complete one of the following:		3
LING A101	How Language Works	
ENGL A311	Writing and Rhetoric in Public Life	
ENGL A435	Critical Theory	
Complete either the single language or dual languages option below.		17-18
Total Credits		36-37

* *CHIN A201 and JPN A201 and CHIN A202 and JPN A202 have the same course numbers but different titles.*

Single Language Option

- Choose one of the following languages: French, German, Japanese or Spanish.
- Complete 12 credits of approved upper-division electives in or related to the primary language or culture, at least 9 of which must be taught in the primary language (contact language program coordinator for list of approved courses taught in English).
- Complete an additional 6 credits of primary language approved electives in or related to the primary language or culture, but which must be upper-division if taught in the primary language (contact department for list of approved courses taught in English).

Dual Languages Option

- Choose a primary language from the following: French, German, Japanese or Spanish.
- Choose a secondary language from the following: American Sign Language, Chinese, French, German, Japanese, Russian or Spanish.

- Complete 9 credits of approved upper-division electives in or related to the primary language or culture, at least 6 of which must be taught in the primary language (contact language program coordinator or see department for list of approved courses taught in English).
- Complete 8 credits beyond A102 in the secondary language.

Other Requirements

1. Students must petition to substitute study abroad language courses for certain major requirements.
2. Students may not earn a major and a minor in the same language.
3. Students must take at least 6 upper-division credits in the respective primary language, in courses numbered higher than A302 in residence at UAA.

Special note: The Bachelor of Arts Assessment Plan adopted by the Department of Languages in 2012-13 requires language majors to, during their final semester prior to graduation, complete an exit exam consisting of both oral and written components and submit one archived student artifact representative of their upper-division work. These assessment procedures are for programmatic evaluation only.

A total of 120 credits is required for the degree, of which 42 credits must be upper division.

Honors in Languages

The Department of Languages recognizes exceptional academic achievement by awarding students departmental honors.

To graduate with departmental honors, the student must:

- Be a declared languages major.
- Satisfy all requirements for a BA in Languages.
- Meet the requirements for Graduation with Honors. (p. 38)
- Maintain a minimum overall GPA of 3.80.
- Maintain a minimum GPA of 3.90 in courses taken in the primary language option beyond A302.

Program Student Learning Outcomes

Students graduating with a Bachelor of Arts in Languages will be able to:

- Communicate effectively in both spoken and written forms, as per the American Council on the Teaching of Foreign Languages Guidelines, in the emphasis language.
- Demonstrate close reading and critical analysis of authentic texts in the emphasis languages.
- Articulate knowledge of cross-cultural similarities and differences, appropriately communicating this knowledge within a given context in the emphasis language.

Minor in Languages

Students who wish to minor in languages must complete the following requirements:

1. A total of 19 credits taught in the target language at or above the 200 level with at least 11 credits being upper division.
2. Credits must be in one discipline chosen from the following languages:
 - a. French
 - b. German
 - c. Japanese
 - d. Spanish

Liberal Studies

www.uaa.alaska.edu/liberalstudies (<http://www.uaa.alaska.edu/liberalstudies>)

Admissions to the Bachelor of Liberal Studies have been suspended. Currently admitted majors should contact the College of Arts and Sciences Dean's Office at (907) 786-1387 for information about completing their degree program.

Program of Study

Bachelor of Liberal Studies

- Bachelor of Liberal Studies (p. 137)

Bachelor of Liberal Studies

Admission to this program is currently suspended. Contact the College of Arts and Sciences for more information.

Mathematics and Statistics

Social Sciences Building (SSB), Room 154, (907) 786-1744

www.uaa.alaska.edu/mathematics-and-statistics ([http://](http://www.uaa.alaska.edu/mathematics-and-statistics)

www.uaa.alaska.edu/mathematics-and-statistics)

The Department of Mathematics and Statistics offers a Bachelor of Science degree and a Bachelor of Arts degree in Mathematics.

The baccalaureate degree programs in mathematics offer an excellent foundation for any career involving theoretical or applied mathematics. Well-trained mathematicians are in demand in many sectors of society, including business, finance, education, computing and government. Both baccalaureate degrees prepare a student for graduate study in the mathematical sciences. Baccalaureate degrees (with appropriately chosen electives) also satisfy Council for the Accreditation of Educator Preparation (CAEP) formerly known as National Council for Accreditation of Teacher Education (NCATE) standards and prepare a student to teach mathematics at the high school level.

In addition, the Department of Mathematics and Statistics offers courses and programs for those students who wish to:

- Obtain an Associate of Applied Science degree
- Obtain an Associate of Arts degree
- Obtain a variety of certificates
- Obtain a Minor in Mathematics to enhance studies in another discipline

- Develop expertise in statistical methods and analysis
- Improve job-related mathematics skills
- Study mathematics for self-interest

Programs of Study

Bachelor of Arts

- BA in Mathematics (p. 137)

Bachelor of Science

- BS in Mathematics (p. 139)

Minor

- Minor in Mathematics (p. 140)

Faculty

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Brian Wick, Professor Emeritus

Yelena Yagodina, Term Assistant Professor, yyagodina@alaska.edu

Bachelor of Arts in Mathematics

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Graduation Requirements

1. Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
2. Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
3. Complete the major and additional requirements below.

Major Requirements

Code	Title	Credits
Core Courses		
MATH A251	Calculus I	4
MATH A252	Calculus II	4
MATH A253	Calculus III	4
MATH A264	Introduction to the Mathematics Major	1

MATH A265	Fundamentals of Mathematics	3
MATH A303	Introduction to Abstract Algebra	3
MATH A306	Discrete Methods	3
MATH A314	Linear Algebra	3
MATH A324	Introduction to Real Analysis	3
MATH A420	Historical Mathematics	3

Analysis and Topology

Select one of the following: 3

MATH A321	Analysis of Several Variables	
MATH A410	Introduction to Complex Analysis	
MATH A430	Concepts of Topology	
MATH A431	Introduction to Differential Geometry	

Applied Math

Select one of the following: 3

BIOL/CHEM/PHYS A456	Nonlinear Dynamics and Chaos	
MATH A302	Ordinary Differential Equations	
MATH A422	Partial Differential Equations	
MATH A426	Numerical Analysis	

Statistics

Select one of the following: 3-4

MATH A371	Stochastic Processes	
MATH A407	Mathematical Statistics	
STAT A307	Probability and Statistics	
STAT A308	Intermediate Statistics for the Sciences	
STAT A401	Statistical Methods	
STAT A402	Scientific Sampling	
STAT A403	Regression Analysis	
STAT A404	Analysis of Variance	
STAT A407	Time Series Analysis	
STAT A408	Multivariate Statistics	

Other Mathematics Courses

Select one of the following: 3

MATH A305	Introduction to Geometries	
MATH A309	Introduction to Number Theory	
MATH A490	Selected Topics in Mathematics	

Select any 6 additional credits from any of the four categories above. 6

Additional Courses

PHIL A101 Introduction to Logic 3

Select 6 credits from the following (a WRTG GER plus one additional selection): 6

WRTG A212	Writing and the Professions	
WRTG A213	Writing and the Sciences	
WRTG A214	Arguing Across Contexts	
ENGL A311	Writing and Rhetoric in Public Life	
ENGL A312	Advanced Technical Writing	

ENGL A313	Professional Writing	
ENGL A414	Research Writing	
Select 6 credits from the following:		6
COMM A101	Introduction to Human Communication	
COMM A111	Fundamentals of Oral Communication	
COMM A235	Small Group Communication	
COMM A236	Interviewing	
COMM A237	Interpersonal Communication	
COMM A241	Public Speaking	
COMM A341	Advanced Public Speaking	
COMM A410	Communication in Education	
THR A121	Introduction to Acting	

Mathematics Capstone Experience

Select 1-3 credits from the following: 1-3

MATH A495A	Mathematics Practicum	
MATH A495B	Mathematics or Statistics Internship	
MATH A496	Advanced Readings in Mathematics	
MATH A498	Individual Research	

Total Credits 65-68

* A maximum of 6 credits of MATH A490, MATH A495A, MATH A495B, MATH A496 and MATH A498 may be applied to the degree requirements.

Additional Requirements

- All mathematics majors must take a standardized test of knowledge of mathematics approved by the mathematics faculty for the purpose of evaluating program effectiveness. There is no minimum score required for graduation. This test will normally be taken during the senior year.
- All mathematics majors must complete a portfolio demonstrating their mathematics knowledge. There is no grade for this requirement. The portfolio will normally be submitted in the semester of graduation.

A total of 120 credits is required for the degree, of which 42 credits must be upper-division.

Honors in Mathematics

Students majoring in mathematics are eligible to graduate with departmental honors if they satisfy the following requirements:

1. Meet the requirements for Graduation with Honors (p. 38).
2. Meet the requirements for a BA/BS in Mathematics.
3. Earn a cumulative grade point average of 3.50 or above in the major requirements.
4. Complete a minimum of 12 upper-division credits required for the major in residence.

Program Student Learning Outcomes

Students graduating with a Bachelor of Arts in Mathematics will be able to:

- Demonstrate knowledge of the techniques of modern mathematical subjects including calculus, linear algebra, abstract algebra, real analysis, discrete mathematics, and probability and statistics.
- Demonstrate an ability to construct proofs and solve problems using deductive logic, data analysis, computation, modeling and connections.
- Demonstrate an ability to read, write and speak mathematics.
- Demonstrate cognizance of their mathematical knowledge, of mathematics around them, and the need for lifelong learning.

Bachelor of Science in Mathematics

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the major and additional requirements below.

Major Requirements

Code	Title	Credits
Core Courses		
MATH A251	Calculus I	4
MATH A252	Calculus II	4
MATH A253	Calculus III	4
MATH A264	Introduction to the Mathematics Major	1
MATH A265	Fundamentals of Mathematics	3
MATH A303	Introduction to Abstract Algebra	3
MATH A306	Discrete Methods	3
MATH A314	Linear Algebra	3
MATH A324	Introduction to Real Analysis	3
Analysis and Topology		
Select one of the following:		3
MATH A321	Analysis of Several Variables	
MATH A410	Introduction to Complex Analysis	
MATH A430	Concepts of Topology	
MATH A431	Introduction to Differential Geometry	
Applied Math		
Select one of the following:		3
BIOL/CHEM/PHYS A456	Nonlinear Dynamics and Chaos	

MATH A302	Ordinary Differential Equations
MATH A422	Partial Differential Equations
MATH A426	Numerical Analysis

Statistics

Select one of the following:		3-4
MATH A371	Stochastic Processes	
MATH A407	Mathematical Statistics	
STAT A307	Probability and Statistics	
STAT A308	Intermediate Statistics for the Sciences	
STAT A401	Statistical Methods	
STAT A402	Scientific Sampling	
STAT A403	Regression Analysis	
STAT A404	Analysis of Variance	
STAT A407	Time Series Analysis	
STAT A408	Multivariate Statistics	

Other Mathematics Courses

Select one of the following:		3
MATH A305	Introduction to Geometries	
MATH A309	Introduction to Number Theory	
MATH A420	Historical Mathematics	
MATH A490	Selected Topics in Mathematics	

Select 6 additional credits from the four categories above. 6

Select from one of the following options: 12-18

Option 1: Statistics (12 credits)

Complete 12 additional credits not already selected from the statistics list above

Option 2: Computer Science (13 credits)

CSCE A201 Computer Programming I

Complete 9 additional credits from CSCE with at most 3 credits from the 100-level

Option 3: Physics (14 credits)

PHYS A211 General Physics I
 PHYS A211L General Physics I Laboratory
 PHYS A212 General Physics II
 PHYS A212L General Physics II Laboratory

Complete 6 additional credits of upper-division PHYS courses not applied above

Option 4: Finance (18 credits)

CIS A110 Computer Concepts in Business
 BA A273 Introduction to Statistics for Business and Economics
 BA A325 Corporate Finance

Complete 9 credits of upper-division finance courses from the list below:

BA A380 Investment Management
 BA A385 Intermediate Financial Management

BA A427	International Finance	
BA A451	Advanced Investment Strategies	
BA A452	Financial Derivatives	
Mathematics Capstone Experience		1
Select from one of the following options.		
MATH A495A	Mathematics Practicum	
MATH A495B	Mathematics or Statistics Internship	
MATH A496	Advanced Readings in Mathematics	
MATH A498	Individual Research	
Total Credits		59-66

* A maximum of 6 credits of MATH A490, MATH A495A, MATH A495B, MATH A496 and MATH A498 may be applied to the degree requirements.

Additional Requirements

- All mathematics majors must take a standardized test of knowledge of mathematics approved by the mathematics faculty for the purpose of evaluating program effectiveness. There is no minimum score required for graduation. This test will normally be taken during the senior year.
- All mathematics majors must complete a portfolio demonstrating their mathematics knowledge. There is no grade for this requirement. The portfolio will normally be submitted in the semester of graduation.

A total of 120 credits is required for the degree, of which 42 credits must be upper-division.

Honors in Mathematics

Students majoring in mathematics are eligible to graduate with departmental honors if they satisfy the following requirements:

1. Meet the requirements for Graduation with Honors (p. 38).
2. Meet the requirements for a BA/BS in Mathematics.
3. Earn a cumulative grade point average of 3.50 or above in the major requirements.
4. Complete a minimum of 12 upper-division credits required for the major in residence.

Program Student Learning Outcomes

Students graduating with a Bachelor of Science in Mathematics will be able to:

- Demonstrate knowledge of the techniques of modern mathematical subjects including calculus, linear algebra, abstract algebra, real analysis, discrete mathematics, and probability and statistics.
- Demonstrate an ability to construct proofs and solve problems using deductive logic, data analysis, computation, modeling, and connections.
- Demonstrate an ability to read, write, and speak mathematics.

- Demonstrate cognizance of their mathematical knowledge, of mathematics around them, and the need for life-long learning.

Minor in Mathematics

Students majoring in another subject who wish to minor in mathematics must complete the following requirements.

Code	Title	Credits
MATH A251	Calculus I	4
MATH A252	Calculus II	4

Complete at least 10 credits from the following (at least 6 at the upper-division level):

MATH A253	Calculus III
MATH A261	Introduction to Discrete Mathematics
MATH A264	Introduction to the Mathematics Major
MATH A265	Fundamentals of Mathematics
MATH A302	Ordinary Differential Equations
MATH A303	Introduction to Abstract Algebra
MATH A305	Introduction to Geometries
MATH A306	Discrete Methods
MATH A309	Introduction to Number Theory
MATH A314	Linear Algebra
MATH A321	Analysis of Several Variables
MATH A324	Introduction to Real Analysis
MATH A371	Stochastic Processes
MATH A407	Mathematical Statistics
MATH A410	Introduction to Complex Analysis
MATH A420	Historical Mathematics
MATH A422	Partial Differential Equations
MATH A423	Advanced Engineering Mathematics
MATH A424	Advanced Engineering Mathematics: Linear and Numerical Analysis
MATH A425	Advanced Engineering Mathematics: Partial Differential Equations and Complex Variables
MATH A426	Numerical Analysis
MATH A430	Concepts of Topology
MATH A431	Introduction to Differential Geometry
MATH A490	Selected Topics in Mathematics

* A maximum of 6 credits of MATH A490 may be applied to the program requirements.

A total of 18 credits is required for the minor, 6 of which must be approved upper-division mathematics credits.

Music

Fine Arts Building (ARTS), Room 302, (907) 786-1595
www.uaa.alaska.edu/music (<http://www.uaa.alaska.edu/music>)

The Department of Music is dedicated to providing leadership in the musical arts for the state of Alaska. This is accomplished through teaching, performance, recordings, composition, publication, community outreach, and other creative and service-oriented endeavors related to the field of music. At the institutional level, the Department of Music, as a unit of the College of Arts and Sciences, provides a vital liberal arts link for the University of Alaska Anchorage.

The department exerts intellectual, pedagogic and creative leadership at the college, pre-college and community levels. Its music degree programs foster excellence in the preparation of music students for graduate school, teacher training or other careers in music. Music faculty and programs also serve as an important community resource in the training of pre-college talent. In addition, the department seeks to serve the lifelong learning component of the university mission in that it supports courses needed for professional development and offers the community access to opportunities for continuing education.

The Department of Music offers two degree programs: the Bachelor of Arts in Music and the Bachelor of Music. Students in the Bachelor of Music program select either a performance concentration or music education concentration, or both. In addition, students in the Bachelor of Music may select to also have a jazz emphasis.

The Bachelor of Arts in Music is a curriculum planned for those desiring a broad liberal arts education with a concentration in music. Students pursuing this degree sample courses of their choosing in each of the major academic areas while still having time to strengthen understanding and performance in their chosen musical area.

The Bachelor of Music with a performance concentration is a professional music degree. Students focus on the development of skills, concepts and sensitivities essential for success as a performing musician. Students work to achieve a high level of technical competence in their performing area while gaining a broad knowledge of music theory, history and literature.

The Bachelor of Music with a music education concentration is a four-year program that provides initial training for a career in teaching music. This professional music degree is followed by a one-year Master of Arts in Teaching program which completes the requirements for the initial teaching certificate in music K-12. Contact the College of Education (<http://www.uaa.alaska.edu/coe/degrees>) for more information.

Programs of Study

Bachelor of Arts

- BA in Music (p. 141)

Bachelor of Music

- Bachelor of Music (p. 143)

Faculty

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 Grant Cochran, Associate Professor/Chair, grcochran@alaska.edu
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 Karen Strid-Chadwick, Professor, ksstridchadwick@alaska.edu
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Bachelor of Arts in Music

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Degrees (p. 53).

Declaring a major in music assumes evidence of musicianship and performance ability. To demonstrate music skills, all incoming freshmen and transfer students are required to complete an audition/performance examination and music theory placement examination prior to their first semester. This assists faculty in determining each student's readiness for entry into juried private lessons, ensembles and academic music classes. Students judged not ready for juried private lessons will be required to complete non-juried private lessons to build performance skills. To develop prerequisite understanding of music theory, those students not ready for theory and aural skills courses will be required to complete MUS A111. Upon completion of the performance evaluation, faculty advisors will assist students in planning a first year of study best suited to their needs.

Academic Requirements

At the end of the sophomore year, all music majors must demonstrate a satisfactory level of proficiency of performance on their applied instrument in order to advance to upper-division courses. A student may elect to continue private instruction at the 200 level in attempting to pass requirements for admission to upper-division study. Students must also have completed a music technical training workshop and must have demonstrated proficiency in all aspects of recital technical support.

MUS A154D and the piano proficiency examination by jury must be passed prior to completion of 60 credits in the program. Music majors may not enroll in certain upper-division music courses until this jury examination is passed. See music degree listings for specific requirements.

Graduation Requirements

1. Complete the General University Requirements for Baccalaureate Degrees (p. 85).
2. Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
3. Complete the College of Arts and Sciences Requirements (p.).
4. Complete the major requirements below.

Major Requirements

Code	Title	Credits
Core Courses		
MUS A131	Music Theory I	3
MUS A132	Music Theory II	3
MUS A133	Aural Skills I	2
MUS A134	Aural Skills II	2
MUS A154D	Functional Piano IV	1
Complete one of the following:		3
MUS/AKNS A215	Music of Alaska Natives and Indigenous Peoples of Northern Regions	
MUS/AKNS A216	World Indigenous Music	
MUS A221	History of Western Art Music I	3
MUS A222	History of Western Art Music II	3
MUS A231	Music Theory III	3
MUS A232	Music Theory IV	3
MUS A233	Aural Skills III	2
MUS A234	Aural Skills IV	2
MUS A280	Basic Conducting	2
MUS A331	Form and Analysis	3
Total Credits		35

Music majors may not enroll in certain upper-division academic courses (MUS A331, MUS A421, MUS A422, MUS A423, MUS A424, MUS A431 or MUS A432, for example) or in upper-division private lessons (MUS A361) until they have passed the Piano Proficiency examination by jury.

Additional Requirements

Code	Title	Credits
Private lessons on your major instrument		
MUS A161	Private Lessons	2
MUS A162	Private Lessons	2
MUS A261	Private Lessons	2
MUS A262	Private Lessons	2
Total Credits		8

All music majors enrolled in juried private music lessons must, during each semester of enrollment:

- Perform in at least one student recital.
- Stand for jury finals.
- Participate in an appropriate ensemble (see the ensemble requirements below).
- Attend department-approved recitals and concerts which provide a variety of musical experiences and expand the curriculum. A minimum attendance requirement is set by the department each semester; failure to meet this number will lower by one letter the grade assigned for private lessons.

Code	Title	Credits
Ensemble		10
Five semesters of ensembles are required. Select the class appropriate to your major instrument:		
MUS A301B	University Singers	
MUS A302B	Chamber Music and Accompanying	
MUS A303B	University Wind Ensemble	
MUS A307B	University Sinfonia	
MUS A405B	University Jazz Ensemble	
MUS A409B	University Guitar Ensemble	
Master Class:		4-8
Four semesters of master class are required. Select the class appropriate to your major instrument:		
MUS A408B	University Percussion Ensemble	
MUS A466	String and Wind Master Class	
MUS A467	Piano Master Class	
MUS A468	Voice Master Class	
MUS A469	Guitar Master Class	
Total Credits		14-18

Students are also required to take a 3-credit elective.

A minimum of 121 credits is required for the degree, of which 42 credits must be upper division.

Honors in Music

The Department of Music recognizes students who demonstrate exceptional promise in their discipline by awarding them departmental honors upon graduation. To graduate with honors, the student must:

1. Be a declared music major.
2. Meet all requirements for the Bachelor of Arts in Music or the Bachelor of Music degree.
3. Maintain a cumulative grade point average of 3.50 or higher in all music courses applicable to the degree.
4. Meet the requirements for Graduation with Honors (p. 38). These include:
 - a. A cumulative GPA of 3.50 or higher in all college work attempted at both UAA and at all other accredited institutions attended and for all courses used to fulfill the degree program.
 - b. Completion of at least 30 academic credits at this institution.
5. Complete MUS A462, which includes a senior recital, with a grade of B or above.

Bachelor of Arts Music majors may, upon successful completion of MUS A262 with a grade of A, offer an honors performance for faculty adjudicators selected by the department chair and the candidate.
6. Receive an honors score (based on criteria established by the department) on a comprehensive examination for majors.

Program Student Learning Outcomes

Students completing a degree in Music will be able to:

- Demonstrate technical proficiency on a chosen instrument appropriate to the degree with an attendant functional proficiency on piano.
- Demonstrate and analyze through musical literacy the basic technical principles used in the construction of music and its basic forms.
- Communicate a knowledge of the various musical periods and representative forms from those periods in the social, artistic and political context of each.

Bachelor of Music

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Declaring a major in music assumes evidence of musicianship and performance ability. To demonstrate music skills, all incoming freshmen and transfer students are required to complete an audition/performance examination and music theory placement examination prior to their first semester. This assists faculty in determining each student's readiness for entry into juried private lessons, ensembles, and academic music classes. Students judged not ready for juried private lessons will be required to complete non-juried private lessons to build performance skills. To develop prerequisite understanding of music theory, those students not ready for theory and aural skills courses will be required to complete MUS A111. Upon completion of the performance evaluation, faculty advisors will assist students in planning a first year of study best suited to their needs.

Academic Requirements

At the end of the sophomore year, all music majors must demonstrate a satisfactory level of proficiency of performance on their applied instrument in order to advance to upper division courses. A student may elect to continue private instruction at the 163 level while attempting to pass requirements for admission to upper division study. Students must also have completed a music technical training workshop and demonstrated proficiency in all aspects of recital technical support.

MUS A154D and the piano proficiency examination by jury must be passed prior to completion of 60 credits in the program. Music majors may not enroll in certain upper division music courses until this jury examination is passed. See music degree listings for specific requirements.

Graduation Requirements

- Complete the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the major requirements below.

- Complete the music performance or education concentration listed below.

Major Requirements

Code	Title	Credits
Core Courses		
MUS A131	Music Theory I	3
MUS A132	Music Theory II	3
MUS A133	Aural Skills I	2
MUS A134	Aural Skills II	2
MUS A154D	Functional Piano IV	1
Choose one of the following:		3
MUS/AKNS A215	Music of Alaska Natives and Indigenous Peoples of Northern Regions	
MUS/AKNS A216	World Indigenous Music	
MUS A221	History of Western Art Music I	3
MUS A222	History of Western Art Music II	3
MUS A231	Music Theory III	3
MUS A232	Music Theory IV	3
MUS A233	Aural Skills III	2
MUS A234	Aural Skills IV	2
MUS A280	Basic Conducting	2
MUS A331	Form and Analysis	3
MUS A381	Choral Conducting	2
or MUS A382	Instrumental Conducting	
Total Credits		37

Music majors may not enroll in certain upper division academic courses (MUS A331, MUS A421, MUS A422, MUS A423, MUS A424, MUS A431 or MUS A432, for example) or in upper division private lessons (MUS A361) until they have passed the Piano Proficiency examination by jury.

Additional Major Requirements

Code	Title	Credits
Private Lessons on the major instrument		
MUS A161	Private Lessons	2
MUS A162	Private Lessons	2
MUS A261	Private Lessons	2
MUS A262	Private Lessons	2
MUS A361	Private Lessons	2
MUS A362	Private Lessons	2
MUS A461	Private Lessons	2
MUS A462	Private Lessons	2
Total Credits		16

All music majors enrolled in juried private music lessons must, during each semester of enrollment:

- Perform in at least one student recital.
- Stand for jury finals.
- Participate in an appropriate ensemble. See the ensemble requirements specific to each degree below.
- Attend department-approved recitals and concerts which provide a variety of musical experiences and expand the curriculum. A minimum attendance requirement is set by the department each semester; failure to meet this number will lower by one letter the grade assigned for private lessons.

Code	Title	Credits
Ensemble		16

Select the class appropriate to the major instrument:

MUS A301B	University Singers
MUS A302B	Chamber Music and Accompanying
MUS A303B	University Wind Ensemble
MUS A307B	University Sinfonia
MUS A409B	University Guitar Ensemble

Piano and guitar majors must choose 4 credits from the following ensembles:

MUS A301B	University Singers
MUS A303B	University Wind Ensemble
MUS A307B	University Sinfonia

Chamber Ensemble	2-4

Wind, voice and string majors only must meet a two-semester, small ensemble requirement. This requirement is fulfilled by performing on the major instrument in one of these courses:

MUS A302B	Chamber Music and Accompanying
MUS A313	Opera Workshop
MUS A365	Chamber Ensemble
MUS A407	Jazz Combo
MUS A408B	University Percussion Ensemble
MUS A409B	University Guitar Ensemble

Master Class	8-16

Eight semesters of master class are required. Choose the class appropriate to the major instrument:

MUS A408B	University Percussion Ensemble
MUS A466	String and Wind Master Class
MUS A467	Piano Master Class
MUS A468	Voice Master Class
MUS A469	Guitar Master Class

Music Performance Concentration

Code	Title	Credits

Music History Elective

Choose from the following: 6

MUS A421	Music in the Baroque Period
MUS A422	Music in the Classical Period

MUS A423	Music in the Romantic Period

MUS A424	Music in the 20th Century

Orchestration and Counterpoint

Choose from the following: 3

MUS A431	Counterpoint

MUS A432	Orchestration

Select an additional music history or theory course from the above list. 3

Select two oral language courses. 8

Total Credits 20

Students choosing the Music Performance concentration must complete a 30-minute junior year recital and a 60-minute senior year recital. In these recitals students must demonstrate the ability to satisfactorily perform a program of artistic merit in public.

A minimum of 125 credits is required for the Bachelor of Music, Music Performance Concentration, of which 42 credits must be upper division.

Music Education Concentration

Code	Title	Credits

Music History Elective 3

Choose one of the following:

MUS A421	Music in the Baroque Period

MUS A422	Music in the Classical Period

MUS A423	Music in the Romantic Period

MUS A424	Music in the 20th Century

Methods and Techniques Courses 12

MUS A371	Brass Methods and Techniques

MUS A372	Woodwind Methods and Techniques

MUS A373	String Methods and Techniques

MUS A374	Voice Methods and Techniques

MUS A375	Percussion Methods and Techniques

MUS A376	Elementary Music Methods and Techniques

Orchestration 3

MUS A432	Orchestration

Total Credits 18

Students choosing the Music Education Emphasis Concentration must complete a 30-minute senior year recital. In this recital students must demonstrate the ability to satisfactorily perform a program of artistic merit in public.

A minimum of 126 credits is required for the Bachelor of Music, Music Performance Concentration, of which 42 credits must be upper division.

Jazz Emphasis

In addition to seeking a Music Performance and/or Music Education Concentration, students may elect to add a Jazz Emphasis by completing the following courses:

Code	Title	Credits
Jazz Theory		6
MUS A315	Jazz Theory I	
MUS A316	Jazz Theory II	
Jazz History		3
MUS A224	History of Jazz	
Private jazz lessons on the major instrument:		4
MUS A161	Private Lessons	
MUS A162	Private Lessons	
Ensemble		6
MUS A405B	University Jazz Ensemble	
Total Credits		19

Music K-12 Certification Information

- Students seeking certification in Music K-12 must complete a one-year Masters of Arts in Teaching (MAT) program through the School of Education (SOE). Admission to the program is limited.
- Application for admission into the SOE MAT program must be completed in the Spring semester for admission to the program the following summer. Contact the School of Education for application deadlines.
- Students seeking music certification must have completed all requirements for the Bachelor of Music degree, Music Education Emphasis Concentration, with a minimum GPA of 2.75 for admission to the SOE MAT program.
- Students must take the Praxis Core Academic Skills for Educations (CASE) examination and the Praxis II Music Content examination for admission to the SOE MAT program.
- Students seeking certification should contact the College of Education for an application packet and a detailed description of the MAT program.

Honors in Music

The Department of Music recognizes students who demonstrate exceptional promise in their discipline by awarding them departmental honors in Music upon graduation. To graduate with honors, the student must:

1. Be a declared Music major.
2. Meet all requirements for the Bachelor of Arts, Music or the Bachelor of Music degree.
3. Maintain a cumulative grade point average of 3.50 or higher in all Music courses applicable to the degree.
4. Meet the requirements for Graduation with Honors (p. 38). These include:
 - a. A cumulative grade point average of 3.50 or higher in all college work attempted at both UAA and at all other accredited institutions attended and for all courses used to fulfill the degree program.
 - b. Completion of at least 30 academic credits at this institution.
5. Complete MUS A462, which includes a senior recital, with a grade of B or above.

Bachelor of Arts Music majors may, upon successful completion of MUS A262 with a grade of A, offer an honors performance for faculty adjudicators selected by the department chair and the candidate.

6. Receive an honors score (based on criteria established by the department) on a comprehensive examination for majors.

Program Student Learning Outcomes

Students completing a degree in Music will be able to:

- Demonstrate technical proficiency on a chosen instrument appropriate to the degree with an attendant functional proficiency on piano.
- Demonstrate and analyze through musical literacy the basic technical principles used in the construction of music and its basic forms.
- Communicate a knowledge of the various musical periods and representative forms from those periods in the social, artistic and political context of each.

Natural Sciences

ConocoPhillips Integrated Sciences Building (CPSB), Room 101, (907) 786-1298

www.uaa.alaska.edu/biology (<http://www.uaa.alaska.edu/biology>)

The undergraduate program in natural sciences is founded on a curriculum that emphasizes the interrelationships among the sciences. A program of study in the natural sciences requires that students select an option within the degree and complete all courses required within the option, as well as sufficient science elective courses to meet minimum unit requirements for graduation.

Students accepted into this flexible degree program select one of three options. The general sciences option is designed for students who are interested in understanding the interrelationships among various scientific fields, or in teaching science at the secondary level. The pre-health professions option is designed to meet the admission requirements of specific professional schools in medicine, dentistry and veterinary medicine. The environmental sciences option is designed to prepare students for graduate school or for employment in the private or public sector.

The natural sciences program is administered by the Department of Biological Sciences. Upon acceptance to the major the student will be assigned an academic advisor from the Department of Biological Sciences in accordance with the student's declared option. Students are strongly encouraged to consult with their academic advisors to determine which electives best suit their career requirements.

Program of Study

Bachelor of Science

- BS in Natural Sciences (p. 146)

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Bachelor of Science in Natural Sciences

Admission Requirements

- Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).
- Declare the major (see major requirements) and select one of three options: General Sciences, Pre-health Professions or Environmental Sciences. To declare the Bachelor of Science in Natural Sciences as their major, students must meet with an advisor and then apply to be accepted into the major. To schedule an advising session, contact the Department of Biological Sciences. At the advising session students are required to:

1. Choose one of the three options.
2. File a preliminary program of study with the Department of Biological Sciences.

Academic Requirements

To graduate with a BS in Natural Sciences, the student must complete all courses covered under major requirements with a grade of C or better. All prerequisites for courses used to meet the natural sciences degree requirements must be completed with a grade of C or better. Students who audit a course intended to meet the natural sciences degree requirements or who are unable to earn a grade of C or better in the course may repeat the course. Students who audit or are unable to earn a grade of C or better in a lower-division (100- or 200-level) Biology (BIOL) course may repeat the course two additional times on a space-available basis. Students who audit or are unable to earn a grade of C or better in an upper-division (300- or 400-level) BIOL course may repeat the course one additional time on a space-available basis. Students repeating a BIOL course are required to complete all components of that course during the semester in which the course is retaken. When repeating a course with a lecture and laboratory component, both components must be repeated. Students enrolled in a BIOL laboratory must attend lab the first week of class or they may be administratively dropped.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- It is recommended that mathematical and statistical requirements be completed in the first two years of study.
- Complete the major requirements below.
- Complete an exit examination.

Major Requirements

1. No more than 6 credits may come from courses designated as A495, A498 and A499 combined, with no more than 2 credits from A495.
2. No more than 4 credits may be A492, with no more than 2 credits from the same discipline.
3. Courses not listed as approved for the BS In Natural Sciences may be considered by petition, which should be signed by an advisor.
4. It is strongly recommended that any changes to the preliminary program be reviewed by an advisor to ensure that the final program of study will meet all requirements for graduation.
5. Students must submit a final Program of Study-Natural Sciences Degree form signed by their advisor to both the Office of the Registrar and the Department of Biological Sciences during the semester prior to the semester in which they plan to graduate. All courses listed in the form must be approved by the formal advisor before submitting the form to the Office of the Registrar and the Department of Biological Sciences.

Environmental Sciences Option

Code	Title	Credits
BIOL A108	Principles and Methods in Biology	6
CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	4

CHEM A106 & A106L	General Chemistry II and General Chemistry II Laboratory	4
ENVI A211	Environmental Science: Systems and Processes	3
ENVI A212	Living on Earth: Introduction to Environmental Studies	3
GEOL A111 & A111L or GEOL A121	Physical Geology and Physical Geology Laboratory Physical Geology for Science and Engineering Majors	4
GEOL A221	Historical Geology	4
Select 52 credits of degree electives, of which 32 must be upper-division credits, from the following course lists.		52

Natural and Physical Sciences

Complete a minimum of 20 credits from the following:

ASTR/BIOL A365	Astrobiology
BIOL/GEOL A178	Fundamentals of Oceanography
BIOL/GEOL A179	Fundamentals of Oceanography Laboratory
BIOL/CPLX A200	Introduction to Complexity
BIOL A242	Fundamentals of Cell Biology
BIOL A243	Experiential Learning: Cell Biology and Genetics
BIOL A252	Principles of Genetics
BIOL A271	Principles of Ecology
BIOL A273	Experiential Learning: Ecology and Evolution
BIOL A288	Principles of Evolution
BIOL A310	Principles of Animal Physiology
BIOL A311	Experiential Learning: Animal Physiology
BIOL A316	Principles of Plant Physiology
BIOL A317	Experiential Learning: Plant Physiology
BIOL A406	Experiential Learning: Biostatistics
BIOL A408	Experiential Learning: Scanning Electron Microscopy (SEM)
BIOL A415	Comparative Animal Physiology
BIOL A418	Fish Physiology
BIOL A423	Ichthyology
BIOL A427	Marine Invertebrate Biology
BIOL A430	Marine Mammal Biology
BIOL A431	Plant Diversity and Evolution
BIOL A441	Animal Behavior
BIOL A442	Experiential Learning: Animal Behavior
BIOL/CHEM/PHYS A456	Nonlinear Dynamics and Chaos
BIOL A466	Fish Ecology

BIOL A467	Wildlife Population Dynamics and Management
BIOL A472	Biogeography
BIOL A473	Conservation Biology
BIOL A474	Ecotoxicology
BIOL A477	Tundra and Taiga Ecosystems
BIOL A478	Biological Oceanography
BIOL A479	Physiological Plant Ecology
BIOL A480	Ecological and Conservation Genetics
BIOL A481	Marine Biology
BIOL A482	Spatial Ecology
BIOL A483	Exploration Ecology
BIOL A484	Experiential Learning: Exploration Ecology Field Study
BIOL A486	Evolutionary Ecology
BIOL A487	Comparative Anatomy of Vertebrates
BIOL A489	Population Genetics and Evolutionary Processes
BIOL A490	Selected Lecture Topics in Biology
BIOL A490L	Selected Laboratory Topics in Biology
BIOL A492	Undergraduate Seminar
BIOL A495A	Internship in the Biological Sciences
BIOL A498	Individual Research
BIOL A499	Senior Thesis
CHEM A253	Principles of Inorganic Chemistry
CHEM A312	Quantitative Analysis
CHEM A321	Organic Chemistry I
CHEM A322	Organic Chemistry II
CHEM A323L	Organic Chemistry Laboratory
CHEM A332	Physical Chemistry II
CHEM A411	Biophysical Chemistry
CHEM A434	Instrumental Methods
CHEM A441	Principles of Biochemistry I
CHEM A442	Principles of Biochemistry II
CHEM A443	Biochemistry Laboratory
CHEM A450	Environmental Chemistry
CHEM A492	Undergraduate Seminar
CHEM A498	Individual Research
GEOL A115	Environmental Geology
GEOL A115L	Environmental Geology Laboratory
GEOL A190	Introductory Topics in Geology
GEOL A320	Volcanology
GEOL A321	Mineralogy
GEOL A322	Igneous and Metamorphic Petrology

GEOL A325	Geology of Ore Deposits
GEOL A332	Sedimentary Petrology Laboratory
GEOL A335	Structural Geology
GEOL A350	Geomorphology
GEOL A380	Anchorage Field Studies
GEOL A381	Kenai Peninsula Field Studies
GEOL A382	Geologic Field Studies
GEOL A430	Sedimentology
GEOL A431	Stratigraphy
GEOL A452	Sedimentology and Stratigraphy
GEOL A454	Glacial and Quaternary Geology
GEOL A455	Permafrost
GEOL A456	Geoarchaeology
GEOL A461	Geochemistry
GEOL A463	Environmental Geochemistry
GEOL A480	Geologic Field Methods
GEOL A481	Alaskan Field Investigations
GEOL A482	Geologic Field Investigations
GEOL A490	Advanced Topics in Geology
GEOL A492	Geology Seminar
GEOL A495	Geology Internship
GEOL A498	Student Research
GEOL A499	Senior Thesis
LSIS A201	Life on Earth
LSIS A202	Concepts and Processes: Natural Sciences
MBIO A340	Microbial Biology
MBIO A342	Experiential Learning: Microbial Biology
MBIO A410	Microbial Physiology
MBIO A420	Pathogenic Microbiology
MBIO A421	Experiential Learning: Pathogenic Microbiology
MBIO A440	Microbial Diversity
MBIO A450	Microbial Ecology
MBIO A451	Microbial Biotechnology
MBIO A452	Microbial Genetics
MBIO A453	Experiential Learning: Microbial Ecology
MBIO/GEOL A468	Geomicrobiology
PHYS A123 & A123L	College Physics I and College Physics I Laboratory *
or PHYS A211 & A211L	General Physics I and General Physics I Laboratory
PHYS A124 & A124L	College Physics II and College Physics II Laboratory *
or PHYS A212 & A212L	General Physics II and General Physics II Laboratory
PHYS A303	Modern Physics

Math and Computational Skills

Complete a minimum of 15 credits from the following:

CS A109	Computer Programming (Languages Vary)
or CS A110	Java Programming
or CS A111	Visual Basic .NET Programming
or CSCE A201	Computer Programming I
CSCE A222	Object-Oriented Programming I
CSCE A311	Data Structures and Algorithms
CSCE A351	Automata, Algorithms and Complexity
CSCE A360	Database Systems
CSCE A381	Computer Graphics
CSCE A405	Artificial Intelligence
CSCE A412	Evolutionary Computing
GEO A359	Geodesy and Map Projections
GIS A370	GIS and Remote Sensing for Natural Resources
GIS A458	Spatial Data Management
GIS A466	Spatial Analysis
GIS A467	Image Analysis
MATH A251	Calculus I
MATH A252	Calculus II
MATH A253	Calculus III
MATH A261	Introduction to Discrete Mathematics
MATH A265	Fundamentals of Mathematics
MATH A302	Ordinary Differential Equations
MATH A303	Introduction to Abstract Algebra
MATH A305	Introduction to Geometries
MATH A306	Discrete Methods
MATH A314	Linear Algebra
MATH A321	Analysis of Several Variables
MATH A324	Introduction to Real Analysis
MATH A371	Stochastic Processes
MATH A407	Mathematical Statistics
MATH A410	Introduction to Complex Analysis
MATH A422	Partial Differential Equations
STAT A253	Applied Statistics for the Sciences
or STAT A307	Probability and Statistics
STAT A308	Intermediate Statistics for the Sciences
STAT A402	Scientific Sampling
STAT A403	Regression Analysis
STAT A404	Analysis of Variance
STAT A407	Time Series Analysis
STAT A408	Multivariate Statistics

Social Sciences

Complete a minimum of 9 credits from the following:

ANTH A101	Introduction to Anthropology
ANTH A202	Cultural Anthropology
ANTH A205	Biological Anthropology
ANTH A415	Applied Anthropology
CEL A292	Introduction to Civic Engagement
CEL A390	Special Topics in Civic Engagement
ECON A201	Principles of Macroeconomics
ECON A202	Principles of Microeconomics
ECON A210	Environmental Economics and Policy
ECON A300	The Economy of Alaska
ECON A321	Intermediate Microeconomics
ECON A324	Intermediate Macroeconomics
ECON A435	Natural Resource Economics
ENVI A470	Environmental Planning and Problem Solving
ENVI A490	Topics in Environment and Society
GEOG/INTL A101	Local Places/Global Regions: An Introduction to Geography
PHIL A303	Environmental Ethics
SOC A101	Introduction to Sociology
SOC A404	Environmental Sociology
Total Credits	80

* Students cannot get credit for both *PHYS A123/PHYS A123L* and *PHYS A211/PHYS A211L* or *PHYS A124/PHYS A124L* and *PHYS A212/PHYS A212L*

Pre-Health Professions Option

Code	Title	Credits
BIOL A108	Principles and Methods in Biology	6
CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	4
CHEM A106 & A106L	General Chemistry II and General Chemistry II Laboratory	4
PHYS A123 & A123L	College Physics I and College Physics I Laboratory	4
PHYS A124 & A124L	College Physics II and College Physics II Laboratory	4
Complete 58 credits of degree electives, of which a minimum of 32 must be upper division, from the following course lists:		58

Natural Sciences

Complete a minimum of 24 credits from the following:

BIOL A111	Human Anatomy and Physiology I
BIOL A112	Human Anatomy and Physiology II
BIOL/CPLX A200	Introduction to Complexity

BIOL A240	Introductory Microbiology for Health Sciences
or MBIO A340 & MBIO A342	Microbial Biology and Experiential Learning: Microbial Biology
BIOL A242	Fundamentals of Cell Biology
BIOL A243	Experiential Learning: Cell Biology and Genetics
BIOL A252	Principles of Genetics
BIOL A310	Principles of Animal Physiology
BIOL A311	Experiential Learning: Animal Physiology
BIOL A320	Vertebrate Biology
BIOL A321	Experiential Learning: Vertebrate Biology
BIOL A408	Experiential Learning: Scanning Electron Microscopy (SEM)
BIOL A412	Behavioral Endocrinology
BIOL A413	Neurophysiology
BIOL A414	Chronobiology
BIOL A415	Comparative Animal Physiology
BIOL A417	Applied Kinesiology and Exercise Physiology
BIOL A452	Human Genome
BIOL A455	Experiential Learning: Bioinformatics
BIOL/CHEM/PHYS A456	Nonlinear Dynamics and Chaos
BIOL A461	Molecular Biology
BIOL A463	Molecular Biology of Cancer
BIOL A464	Metals in Biology
BIOL A465	Experiential Learning: Molecular Biology
BIOL/CHEM A471	Immunology
BIOL A487	Comparative Anatomy of Vertebrates
BIOL A489	Population Genetics and Evolutionary Processes
BIOL A490	Selected Lecture Topics in Biology
BIOL A490L	Selected Laboratory Topics in Biology
BIOL A492	Undergraduate Seminar
BIOL A495A	Internship in the Biological Sciences
BIOL A498	Individual Research
CHEM A312	Quantitative Analysis
CHEM A321	Organic Chemistry I
CHEM A322	Organic Chemistry II
CHEM A323L	Organic Chemistry Laboratory
CHEM A411	Biophysical Chemistry
CHEM A434	Instrumental Methods

CHEM A441	Principles of Biochemistry I
CHEM A442	Principles of Biochemistry II
CHEM A443	Biochemistry Laboratory
CHEM A492	Undergraduate Seminar
CHEM A498	Individual Research
MBIO A410	Microbial Physiology
MBIO A420	Pathogenic Microbiology
MBIO A421	Experiential Learning: Pathogenic Microbiology
MBIO A451	Microbial Biotechnology
MBIO A452	Microbial Genetics
MBIO A462	Virology

Social Sciences

Complete a minimum of 15 credits from the following:

ANTH A101	Introduction to Anthropology
ANTH A205	Biological Anthropology
ANTH A452	Culture and Human Biodiversity
ANTH A455	Culture and Health
ANTH A490	Selected Topics in Anthropology
ECON A201	Principles of Macroeconomics
ECON A202	Principles of Microeconomics
HS A210	Introduction to Environmental Health
HS A220	Core Concepts in the Health Sciences
HS A230	Introduction to Global Health
HS A326	Introduction to Epidemiology
HS A492	Senior Seminar: Contemporary Health Policy
PHIL A302	Biomedical Ethics
PSY A111	Introduction to Psychology
PSY A143	Death and Dying
PSY A150	Lifespan Development
PSY A260	Statistics for Psychology
PSY A260L	Statistics for Psychology Lab
PSY A261	Research Methods in Psychology
PSY A345	Abnormal Psychology
PSY A355	Learning and Cognition
PSY A366	Perception
PSY A368	Personality
PSY A370	Behavioral Neuroscience
PSY A412	History of Psychology
PSY A420	Conducting Research in Psychology
PSY A425	Clinical Psychology
PSY A428	Evolutionary Psychology
PSY A450	Adult Development and Aging
PSY A455	Interventions for Challenging Behavior

PSY A485	Health Psychology
PSY A498	Individual Research

Math and Computational Skills

Complete a minimum of 9 credits from the following:

MATH A221	Applied Calculus for Managerial and Social Sciences
or MATH A251	Calculus I
MATH A252	Calculus II
MATH A253	Calculus III
MATH A261	Introduction to Discrete Mathematics
MATH A265	Fundamentals of Mathematics
MATH A302	Ordinary Differential Equations
MATH A303	Introduction to Abstract Algebra
MATH A305	Introduction to Geometries
MATH A306	Discrete Methods
MATH A314	Linear Algebra
MATH A321	Analysis of Several Variables
MATH A324	Introduction to Real Analysis
MATH A371	Stochastic Processes
MATH A407	Mathematical Statistics
MATH A410	Introduction to Complex Analysis
MATH A422	Partial Differential Equations
MATH A490	Selected Topics in Mathematics
MATH A498	Individual Research
STAT A253	Applied Statistics for the Sciences
or STAT A307	Probability and Statistics
STAT A308	Intermediate Statistics for the Sciences
STAT A402	Scientific Sampling
STAT A403	Regression Analysis
STAT A404	Analysis of Variance
STAT A407	Time Series Analysis
STAT A408	Multivariate Statistics

Total Credits 80

General Sciences Option

Code	Title	Credits
BIOL A108	Principles and Methods in Biology	6
CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	4
CHEM A106 & A106L	General Chemistry II and General Chemistry II Laboratory	4
GEOL A111 & A111L	Physical Geology and Physical Geology Laboratory	4
GEOL A221	Historical Geology	4
PHYS A123 & A123L	College Physics I and College Physics I Laboratory	4

or PHYS A211 & A211L	General Physics I and General Physics I Laboratory	
PHYS A124 & A124L	College Physics II and College Physics II Laboratory	4
or PHYS A212 & A212L	General Physics II and General Physics II Laboratory	
Complete an additional 50 credits of degree electives. The credits may come from the following course lists:		50
Environmental Sciences Option Course Lists (see above)		
Pre-Health Professions Option Course Lists (see above)		
ASTR A103	Solar System Astronomy	
ASTR A103L	Solar System Astronomy Laboratory	
ASTR A104	Stars, Galaxies, and Cosmology	
ASTR A104L	Stars, Galaxies, and Cosmology Laboratory	
EE/PHYS A314	Electromagnetics	
EE/PHYS A324	Electromagnetics II	
PHYS A311	Intermediate Classical Mechanics	
PHYS A320	Simulation of Physical Systems	
PHYS A403	Quantum Mechanics	
PHYS A413	Statistical and Thermal Physics	
PHYS A498	Individual Research	
At least two of the following disciplines must be represented at the upper-division level: astronomy, biology, chemistry, geology, mathematics, physics, statistics		
Total Credits		80

A minimum of 120 credits is required for the degree, of which 42 credits must be upper division.

Biological Sciences Exit Examination

All BS Natural Sciences majors are required to complete a nationally standardized exit examination during the semester immediately prior to or during the semester they intend to graduate. There is no minimum score required for graduation.

Program Student Learning Outcomes

Students graduating with a Bachelor of Science in Natural Sciences will be able to:

- Demonstrate their knowledge of the central conceptual models used in the major thematic areas of natural sciences
- Identify problems, devise solutions and communicate solutions effectively

Philosophy

Administration/Humanities Building (ADM), Room 254, (907) 786-4355

www.uaa.alaska.edu/philosophy (<http://www.uaa.alaska.edu/philosophy>)

Philosophy is the creative and critical reflection on enduring questions concerning the nature of the world and our place in it. For example, philosophy asks metaphysical questions about what exists, epistemic questions about what we can claim to know, and ethical questions about the nature of the good life and right action. In addition, philosophy involves the study and practice of good reasoning and clear thinking, skills that are essential to any discipline or profession.

The Philosophy Department offers a variety of courses in the central areas of philosophy that acquaint students with the rich, living traditions of the world and explore historical and contemporary issues. Departmental faculty have a wide range of philosophical interests and expertise, with a particular strength in theoretical and applied ethics.

The department offers several options for students interested in the study of philosophy:

- Bachelor of Arts in Philosophy, with areas of emphasis in ethics, world philosophies and religions, or pre-law.
- Minor in Philosophy.

The Bachelor of Arts in Philosophy is designed to prepare students for graduate study in philosophy or other humanities areas such as religious studies, theology or classics. It is also a suitable second major for those planning graduate studies in history, English, French or German literature. In general, it is ideal for students who are seeking jobs in fields where writing, critical thinking and general liberal arts skills are in demand, or for lifelong learners interested in philosophy.

The Minor in Philosophy is designed for students who are interested in philosophy but pursuing another degree, and for students majoring in a discipline that is complemented by the study of philosophy, such as history, justice, English, psychology, anthropology, sociology, mathematics, political science or the natural sciences.

Programs of Study

Undergraduate Certificate

- Certificate in Applied Ethics (p. 152)

Bachelor of Arts

- BA in Philosophy (p. 152)

Minor

- Minor in Philosophy (p. 152)

Faculty

Raymond Anthony, Professor, rxanthony@alaska.edu

Stephanie Bauer, Associate Professor/Chair slbauer@alaska.edu

William Jamison, Term Instructor, wsjamison@alaska.edu

Terry Kelly, Assistant Professor, tmkelly2@alaska.edu

James Liszka, Professor Emeritus

John Mouracade, Associate Professor, jmmouracade@alaska.edu

Joel Potter, Term Instructor, jmpotter3@alaska.edu

Undergraduate Certificate in Applied Ethics

Admission to this program is currently suspended. Contact the College of Arts and Sciences for more information.

Bachelor of Arts in Philosophy

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Graduation Requirements

- 1. Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- 2. Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- 3. Complete the major requirements below.

Major Requirements

Code	Title	Credits
Core Courses		
PHIL A101	Introduction to Logic	3
PHIL A201	Introduction to Philosophy	3
PHIL A211	Ancient and Medieval Philosophy	3
PHIL A212	Early Modern Philosophy	3
PHIL A301	Ethics	3
PHIL A309	Mind and Machines	3
or PHIL A311	Truth and Reality	
PHIL A350	Contemporary Social and Political Philosophy	3
or PHIL A406	Philosophy of Law	
Mastery Courses		
PHIL A423	Advanced Ethical Theory	3
PHIL A490	Topics in Contemporary Philosophy	3
Electives		
Complete 9 additional upper-division credits from the department's course offerings.		9
Total Credits		36

Occasionally, other departments offer courses that are notably relevant for a student's academic focus. Students wishing to count such a course toward their philosophy degree must first consult with the Philosophy Department chair.

A total of 120 credits is required for the degree, of which 42 credits must be upper-division.

Honors in Philosophy

The Department of Philosophy recognizes exceptional undergraduate students by awarding them departmental honors in philosophy. Students

majoring in any one of the Bachelor of Arts tracks in Philosophy are eligible to graduate with departmental honors upon satisfaction of all of the following requirements:

- 1. Meet the requirements for a Bachelor of Arts in Philosophy.
- 2. Meet the requirements for Graduation with Honors (p. 38).
- 3. Maintain a cumulative grade point average of 3.75 or above in courses specific to the philosophy major.
- 4. Complete PHIL A498 with a grade of A, and a recommendation for departmental honors from the student's faculty committee for this course.
- 5. Notify the chair in writing on or before date on which the Application for Graduation is filed with the Office of the Registrar of the intention to graduate with departmental honors.

Program Student Learning Outcomes

Students completing a BA in Philosophy will be able to:

- Identify, comprehend, analyze, and evaluate complex philosophical arguments in oral and written discourse.
- Understand, analyze, interpret, and apply major works in the areas of the history of philosophy, ethics, and contemporary topics.

Minor in Philosophy

Students majoring in another subject who wish to minor in philosophy must complete the following requirements.

Code	Title	Credits
Ways of Knowing:		
Complete one of the following:		3
PHIL A101	Introduction to Logic	
PHIL A201	Introduction to Philosophy	
PHIL A301	Ethics	
Foundations of Philosophy		
PHIL A211	Ancient and Medieval Philosophy	3
PHIL A212	Early Modern Philosophy	3
Upper Division Electives		
Choose any three upper division Philosophy courses.		9
Total Credits		18

A total of 18 credits is required for the minor, 9 of which must be upper division.

Physics

ConocoPhillips Integrated Sciences Building (CPSB), Room 101, (907) 786-1298
www.uaa.alaska.edu/physicsandastronomy (<http://www.uaa.alaska.edu/physicsandastronomy>)

Physics is the universal science. It is the rational development of experiments, observations and theories to explain the fundamental

structure of the universe. Physicists study everything from the smallest subatomic particle to the entire universe.

The laws that physicists have discovered form the basis for understanding the world and also for making the devices and machines that we see and use every day.

The Minor in Physics will provide a valuable option to engineering, math, computer science, chemistry, biology or geology majors. It is widely known that a strong physics background increases a graduate's employability.

Program of Study

Minor

- Minor in Physics (p. 153)

Faculty

Erin Hicks, Assistant Professor/Planetarium Director, ekhicks@alaska.edu

Nathaniel Hicks, Assistant Professor, nkhicks@alaska.edu

James Pantaleone, Professor, jtpantaleone@alaska.edu

Katherine Rawlins, Professor/Chair, krawlins@alaska.edu

Travis Rector, Professor, tarector@alaska.edu

Minor in Physics

Students majoring in another subject who wish to minor in physics must complete the following requirements.

Code	Title	Credits
PHYS A211	General Physics I	3
PHYS A211L	General Physics I Laboratory	1
PHYS A212	General Physics II	3
PHYS A212L	General Physics II Laboratory	1
PHYS A303	Modern Physics	3
Upper-division Physics electives		7
Total Credits		18

A total of 18 credits is required for the minor.

Political Science

Social Sciences Building (SSB), Room 352, (907) 786-1665
www.uaa.alaska.edu/politicalscience (<http://www.uaa.alaska.edu/politicalscience>)

In its oldest definition, political science was called the master science. More modern definitions are less comprehensive, but of the social sciences, political science has perhaps the least definite boundaries and the widest concerns. Consequently, political science covers many different subjects, uses several diverse methods and appeals to a variety of students.

Students come to political science because they are interested in politics: some of them with an eye to a political career, some with a scholarly intent and many wishing to know more about this central,

inescapable human concern. The Department of Political Science aims to make all students aware and critical of their first opinions (since human beings are at their most opinionated in politics), to open up the possibilities of politics, to reveal the permanent political problems, to impart an intellectual discipline and to supply a guide for choice.

The political science program is divided into four areas: comparative politics, international relations, political philosophy, and American politics. Political science majors are required to take at least one course in each of these areas, to specialize in one of them and to complete introductory courses in political science.

The department also offers a Minor in Political Science. Students pursuing the minor take two introductory courses and four additional upper-division political science electives.

The department welcomes all students who want to learn more about politics. It reserves its honors for majors who earn qualifying marks both in a senior seminar and on a comprehensive examination.

Programs of Study

Bachelor of Arts

- BA in Political Science (p. 153)

Minors

- Minor in Political Science (p. 154)

Faculty

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Kimberly J. Pace, Term Assistant Professor, kjpace@alaska.edu

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Landry Signé, Professor, lsigne@alaska.edu

Bachelor of Arts in Political Science

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the major requirements below.

Major Requirements

Code	Title	Credits
Core Courses		
PS A101	Introduction to American Government	3
PS A102	Introduction to Political Science	3
PS A492	Senior Seminar in Politics	3
Complete one course from each of the four areas below:		12
Comparative Politics		
PS A301	Comparative Political Economy	
PS A311	Comparative Politics	
International Relations		
PS A321	International Relations	
PS A322	United States Foreign Policy	
Political Philosophy		
PS A332	History of Political Philosophy I: Classical	
PS A333	History of Political Philosophy II: Modern	
American Politics		
PS A330	The American Political Tradition	
PS A353	American Political Development	

Electives

Complete 12 additional credits in PS courses. PS A490 may be repeated for up to 6 credits with a change in subtitle.

A total of 120 credits is required for the degree, of which 42 credits must be upper-division; a minimum of 33 credits must be from PS courses.

Honors in Political Science

Students majoring in political science are eligible to graduate with departmental honors if they satisfy all of the following requirements:

1. Meet the requirements for a BA in Political Science.
2. Maintain a grade point average of 3.50 or above in courses applicable to the degree requirements.
3. Complete PS A492 in the final term of study with a grade of A or B.
4. Receive an honors score (based upon criteria established by the department) on a comprehensive examination for majors.

Departmental honors are awarded by the political science faculty.

Program Student Learning Outcomes

Students graduating with a Bachelor of Arts in Political Science will be able to:

- Demonstrate the ability to write clear and precise English prose.
- Demonstrate the ability to understand basic principles of American government.
- Demonstrate the ability to understand the relationship between the United States and the larger world.

- Demonstrate the ability to identify and criticize competing political science arguments.
- Demonstrate the ability to identify and interpret important political texts.
- Demonstrate the ability to write a satisfactory senior-level research paper.
- Demonstrate knowledge of each recognized field within political science.

Minor in Political Science

Students wishing to minor in political science must complete the following requirements.

Code	Title	Credits
Introductory Courses		
PS A101	Introduction to American Government *	3
PS A102	Introduction to Political Science *	3
Upper-division Political Science courses		12
Total Credits		18

* Courses required for political science minors that may be used to meet General Education Requirements and/or College of Arts and Sciences BA requirements.

A total of 18 credits is required for the minor.

Psychology

Social Sciences Building (SSB), Room 352, (907) 786-1665
www.uaa.alaska.edu/psych (<http://www.uaa.alaska.edu/psych>)

The undergraduate psychology program offers mentorship and high-quality training in the science of behavior and mental processes and, in so doing, enriches the lives of our students, citizens of Alaska and the field of psychology. In service of this mission, the faculty provides effective instruction, academic and career advising, research training, professional skill development, service opportunities, and preparation for graduate school and employment in the human service field.

The psychology major requirements are flexible and are designed to serve a variety of career goals. Both a Bachelor of Arts and a Bachelor of Science are available. The student majoring in psychology pursuing a general interest in human nature will probably take a different sequence of psychology courses than a student who is preparing for advanced work in psychology. All students are encouraged to plan undergraduate work carefully. Early and frequent consultation with an advisor is helpful in selecting courses which will provide a solid foundation in psychology and a good general education.

Programs of Study

Bachelor of Arts

- BA in Psychology (p. 155)

Bachelor of Science

- BS in Psychology (p. 157)

Minor

- Minor in Children's Mental Health (p. 159)
- Minor in Psychology (p. 159)

Faculty

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Faculty Emeriti

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Bachelor of Arts in Psychology

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

In addition, students wishing to declare Psychology as a major must have earned a minimum GPA of 2.50.

Academic Requirements

All prerequisites for required Psychology courses must be completed with a minimum grade of C. Students who audit or are unable to earn a minimum grade of C in a lower-division (100- or 200-level) PSY course may repeat the course two additional times on a space-available basis. Students who audit or wish to repeat an upper-division (300- or 400-level) PSY course may repeat the course one additional time on a space-available basis. Students repeating a course are required to complete all components of that course during the semester in which the course is retaken. When repeating a course with a lecture and laboratory component, both components must be repeated.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees. (p. 86)
- Complete the Major Requirements below.

Major Requirements

Code	Title	Credits
Core Requirements		
PSY A111	Introduction to Psychology	3
PSY A150	Lifespan Development	3
PSY A200	Introduction to Behavior Analysis	3
PSY A260	Statistics for Psychology	3
PSY A260L	Statistics for Psychology Lab	1
PSY A261 & A261L	Research Methods in Psychology and Research Methods in Psychology Laboratory	4
PSY A345	Abnormal Psychology	3
PSY A356 & A356L	Psychology of Learning and Psychology of Learning Laboratory	4
PSY A370	Behavioral Neuroscience	3
PSY A375	Social Psychology	3
Psychology Capstone Requirement *		3
Each capstone option is designed to synthesize and apply material from the Psychology major. Choice of a capstone should be based, at least in part, on the student's future career plans. Students planning to work in human service jobs following graduation should consider taking PSY A495A. Students planning on graduate work in Psychology should consider taking PSY A412, PSY A420 or PSY A499. Students may elect to take all of these courses as upper-division electives.		
PSY A412	History of Psychology	
PSY A420	Conducting Research in Psychology	
PSY A428	Evolutionary Psychology	
PSY A495A	Psychology Practicum	
PSY A499	Senior Thesis	

PSY A499A	Developing Psychological Research	
Psychology Electives		9
Take an additional 9 credits of upper-division Psychology courses.		
Writing		3
WRTG A213	Writing and the Sciences	
Mathematics and Statistics		3
MATH A121	College Algebra for Managerial and Social Sciences	
or STAT A200	Elementary Statistics	
Biology		3-6
BIOL A102	Introductory Biology	
or BIOL A108	Principles and Methods in Biology	
Additional Electives		17
Take three Social Science GERs outside of Psychology		
Take an 8-credit sequence of a world language or American Sign Language from the GER list		
Total Credits		68-71

* All of the psychology capstone courses have rigorous prerequisites. Minimum grades of C in these prerequisites are required for admission into the capstone courses. See course descriptions of each capstone course for more details.

All Psychology majors are also required to take the exit examination, a standardized test of knowledge of psychology approved by the Psychology Department. There is no minimum score required for graduation. This exam is taken in the Testing Center and a fee will be charged to students.

A total of 120 credits is required for this degree, of which 42 credits must be upper-division.

Concentration in Behavior Analysis

This concentration provides foundational knowledge and professional skills to apply the science of behavior analysis across a range of settings and client populations, including staff in the workplace, children and adults with intellectual and cognitive disabilities, and individuals with autism spectrum disorder. Completing the coursework below, in addition to required supervised practicum experience with a Board Certified Behavior Analyst, helps prepare students to apply for the Behavior Analysis Certification Board examination for becoming a Board Certified Assistant Behavior Analyst.

Code	Title	Credits
Concentration requirements:		
PSY A200	Introduction to Behavior Analysis	3
PSY A400	Strategies of Behavior Change	3
PSY A495A	Psychology Practicum	3
Complete a minimum of 6 credits from the following:		6
PSY A447	Behavioral Treatment of Autism Spectrum Disorder	

PSY A455	Interventions for Challenging Behavior
PSY A467	Organizational Behavior Management
PSY A478	Applications of Behavior Analysis
Total Credits	15

Honors in Psychology

The Department of Psychology recognizes exceptional undergraduate students by awarding them departmental honors in Psychology. To graduate with departmental honors, the student must be a declared Psychology major and meet the following requirements:

1. Satisfy all requirements for a BA or BS degree in Psychology.
2. Maintain a cumulative GPA of 3.50.
3. Take PSY A412.
4. Take PSY A420.
5. Complete PSY A499. The thesis project must be approved in advance by the Undergraduate Studies Committee and carried out by following applicable departmental guidelines.
6. Students intending to graduate with departmental honors must notify the Departmental Honors Committee in writing on or before the date they file their Application for Graduation with the Office of the Registrar.

Honors Student Learning Outcomes

Students graduating with departmental honors in Psychology will possess:

- An advanced understanding and application of descriptive and inferential statistics and use of statistical software in data analysis.
- A broad knowledge of psychology's historical foundation.
- The ability to conduct a critical review and analysis of existing psychological literature.
- The ability to design and execute empirical research that tests clearly stated hypotheses or addresses clearly articulated research questions.
- A clear understanding of research ethics and the responsible conduct of research in the field of psychology.
- The ability to communicate effectively in writing, in poster format, and in oral presentations, including mastery of APA style.
- The ability to draw conclusions from research findings, including recognition of the limitations, applications, and implications of the data, and a discussion of alternative explanations of the results.

Program Student Learning Outcomes

Students graduating with a Bachelor of Arts in Psychology will:

- Possess a broad knowledge of contemporary psychology.
- Have experience conducting psychological research.
- Be able to demonstrate skills in research design and data analysis.
- Be prepared for advanced study in psychology and related disciplines.

Bachelor of Science in Psychology

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53). In addition, students wishing to declare Psychology as a major must have earned a minimum GPA of 2.50.

Academic Requirements

All prerequisites for required Psychology courses must be completed with a minimum grade of C. Students who audit or are unable to earn a minimum grade of C in a lower-division (100- or 200-level) PSY course may repeat the course two additional times on a space-available basis. Students who audit or wish to repeat an upper-division (300- or 400-level) PSY course may repeat the course one additional time on a space-available basis. Students repeating a course are required to complete all components of that course during the semester in which the course is retaken. When repeating a course with a lecture and laboratory component, both components must be repeated.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the Major Requirements below.

Major Requirements

Code	Title	Credits
Core Requirements		
PSY A111	Introduction to Psychology	3
PSY A150	Lifespan Development	3
PSY A200	Introduction to Behavior Analysis	3
PSY A260	Statistics for Psychology	3
PSY A260L	Statistics for Psychology Lab	1
PSY A261 & A261L	Research Methods in Psychology and Research Methods in Psychology Laboratory	4
PSY A345	Abnormal Psychology	3
PSY A356 & A356L	Psychology of Learning and Psychology of Learning Laboratory	4
PSY A370	Behavioral Neuroscience	3
PSY A375	Social Psychology	3
Psychology Capstone Requirement *		3

Each capstone option is designed to synthesize and apply material from the psychology major. Choice of a capstone should be based, at least in part, on the student's future career plans. Students planning to work in human service jobs following graduation should consider taking PSY A495A. Students planning on graduate work in Psychology should consider taking PSY A412, PSY A420 or PSY A499. Students may elect to take all of these courses as upper-division electives.

PSY A412	History of Psychology
PSY A420	Conducting Research in Psychology
PSY A428	Evolutionary Psychology
PSY A495A	Psychology Practicum
PSY A499	Senior Thesis
PSY A499A	Developing Psychological Research

Psychology Electives 9

Take an additional 9 credits of upper division Psychology courses.

Writing 3

WRTG A213 Writing and the Sciences

Mathematics and Statistics 6-8

Complete two courses from the following list:

MATH A121	College Algebra for Managerial and Social Sciences
or MATH A151	College Algebra for Calculus
MATH A221	Applied Calculus for Managerial and Social Sciences
SOC A462	Social Science Statistics
STAT A200	Elementary Statistics
STAT A253	Applied Statistics for the Sciences

Biology 7-16

BIOL A102	Introductory Biology
or BIOL A108	Principles and Methods in Biology

And complete at least two of the following courses:

BIOL A111	Human Anatomy and Physiology I
BIOL A112	Human Anatomy and Physiology II
BIOL/CPLX A200	Introduction to Complexity
BIOL A240	Introductory Microbiology for Health Sciences
BIOL A242	Fundamentals of Cell Biology
BIOL A252	Principles of Genetics
BIOL A273	Experiential Learning: Ecology and Evolution
BIOL A288	Principles of Evolution
BIOL A311	Experiential Learning: Animal Physiology
BIOL A320	Vertebrate Biology
BIOL A321	Experiential Learning: Vertebrate Biology

BIOL A412	Behavioral Endocrinology
BIOL A413	Neurophysiology
BIOL A414	Chronobiology
BIOL A415	Comparative Animal Physiology
BIOL A417	Applied Kinesiology and Exercise Physiology
BIOL A418	Fish Physiology
BIOL A423	Ichthyology
BIOL A427	Marine Invertebrate Biology
BIOL A430	Marine Mammal Biology
BIOL A441	Animal Behavior
BIOL A442	Experiential Learning: Animal Behavior
BIOL A452	Human Genome
BIOL A454	Experiential Learning: Microbial Biotechnology
BIOL A455	Experiential Learning: Bioinformatics
BIOL A461	Molecular Biology
BIOL A464	Metals in Biology
BIOL A463	Molecular Biology of Cancer
BIOL A466	Fish Ecology
BIOL A467	Wildlife Population Dynamics and Management
BIOL/CHEM A471	Immunology
BIOL A472	Biogeography
BIOL A473	Conservation Biology
BIOL A474	Ecotoxicology
BIOL A477	Tundra and Taiga Ecosystems
BIOL A480	Ecological and Conservation Genetics
BIOL A481	Marine Biology
BIOL A482	Spatial Ecology
BIOL A483	Exploration Ecology
BIOL A484	Experiential Learning: Exploration Ecology Field Study
BIOL A486	Evolutionary Ecology
BIOL A487	Comparative Anatomy of Vertebrates
BIOL A489	Population Genetics and Evolutionary Processes
Experimental and Scientific Foundations	
Complete two of the following courses:	
ANTH A205	Biological Anthropology
ANTH A452	Culture and Human Biodiversity
ANTH A455	Culture and Health
CHEM A103	Introduction to General Chemistry
CHEM A104	Introduction to Organic and Biochemistry
CHEM A105	General Chemistry I

6-7

CHEM A106	General Chemistry II
CHEM A321	Organic Chemistry I
CHEM A322	Organic Chemistry II
CHEM A441	Principles of Biochemistry I
CHEM A442	Principles of Biochemistry II
CS A109	Computer Programming (Languages Vary)
ECON A201	Principles of Macroeconomics
ECON A202	Principles of Microeconomics
ECON A333	Experimental Economics
ECON A456	Behavioral Economics
ECON A459	Industrial Organization and Public Policy
Total Credits	

64-76

* All of the above psychology capstone courses have rigorous prerequisites. Minimum grades of C or higher in these prerequisites are required for admission into psychology's capstone courses.

All Psychology majors are required to take the exit examination, a standardized test of knowledge of psychology approved by the Psychology Department. There is no minimum score required for graduation. The exam is taken in the Advising and Testing Center and a fee will be charged to students.

A total of 120 credits is required for this degree, of which 42 credits must be upper-division.

Concentration in Behavior Analysis

This concentration provides foundational knowledge and professional skills to apply the science of behavior analysis across a range of settings and client populations, including staff in the workplace, children and adults with intellectual and cognitive disabilities, and individuals with autism spectrum disorder. Completing the coursework below, in addition to required supervised practicum experience with a Board Certified Behavior Analyst, helps prepare students to apply for the Behavior Analysis Certification Board examination for becoming a Board Certified Assistant Behavior Analyst.

Code	Title	Credits
Concentration requirements:		
PSY A200	Introduction to Behavior Analysis	3
PSY A400	Strategies of Behavior Change	3
PSY A495A	Psychology Practicum	3
Complete a minimum of 6 credits of the following:		6
PSY A447	Behavioral Treatment of Autism Spectrum Disorder	
PSY A455	Interventions for Challenging Behavior	
PSY A467	Organizational Behavior Management	
PSY A478	Applications of Behavior Analysis	
Total Credits		15

Honors in Psychology

The Department of Psychology recognizes exceptional undergraduate students by awarding them departmental honors in Psychology. To graduate with departmental honors, the student must be a declared Psychology major and meet the following requirements:

1. Satisfy all requirements for a BA or BS degree in Psychology.
2. Maintain a cumulative GPA of 3.50.
3. Take PSY A412.
4. Take PSY A420.
5. Complete PSY A499. The thesis project must be approved in advance by the Undergraduate Studies Committee and carried out by following applicable departmental guidelines.
6. Students intending to graduate with departmental honors must notify the Departmental Honors Committee in writing on or before the date they file their Application for Graduation with the Office of the Registrar.

Honors Student Learning Outcomes

Students graduating with departmental honors in Psychology will possess:

- An advanced understanding and application of descriptive and inferential statistics and use of statistical software in data analysis.
- A broad knowledge of psychology's historical foundation.
- The ability to conduct a critical review and analysis of existing psychological literature.
- The ability to design and execute empirical research that tests clearly stated hypotheses or addresses clearly articulated research questions.
- A clear understanding of research ethics and the responsible conduct of research in the field of psychology.
- The ability to communicate effectively in writing, in poster format, and in oral presentations, including mastery of APA style.
- The ability to draw conclusions from research findings, including recognition of the limitations, applications, and implications of the data, and a discussion of alternative explanations of the results.

Program Student Learning Outcomes

Students graduating with a Bachelor of Science in Psychology will:

- Possess a broad knowledge of contemporary psychology.
- Have experience conducting psychological research.
- Be able to demonstrate skills in research design and data analysis.
- Be prepared for advanced study in psychology and related disciplines.

Minor in Children's Mental Health

The field of children's mental health encompasses numerous disciplines, including early childhood, elementary, secondary and special education; human services; (juvenile) justice; (pediatric) nursing; (child) psychology; and social work. Due to the multidisciplinary nature of this field of study, all of the listed disciplines

are appropriate major emphases for students seeking the Children's Mental Health Minor.

Students who wish to minor in children's mental health must complete the following requirements.

Code	Title	Credits
EDSE A212	Human Development and Learning	3
or PSY A365	Child and Adolescent Development	
PSY A442	Psychopathology of Childhood and Adolescence	3
SWK A410	Trauma in Childhood	3
Complete 9 credits of electives focused on children approved by the Children's Mental Health Minor Committee (including special topics courses focused on children). This may include up to 6 credits of relevant practica or research coursework.*		9
Total Credits		18

* Practica and research coursework (e.g., independent studies, honors or other undergraduate theses) can consist of offerings by various programs but must provide experiences focused on children and be approved in advance by the Children's Mental Health Minor Committee.

The minor requires a total of 18 credits, of which a minimum of 6 must be upper-division.

Minor in Psychology

Students majoring in another subject who wish to minor in psychology must complete the following requirements:

Code	Title	Credits
PSY A111	Introduction to Psychology	3
Complete at least nine credits from the following:		9-10
PSY A150	Lifespan Development	
PSY A260	Statistics for Psychology	
PSY A260L	Statistics for Psychology Lab	
PSY A261	Research Methods in Psychology	
PSY A261L	Research Methods in Psychology Laboratory	
PSY A345	Abnormal Psychology	
PSY A356	Psychology of Learning	
PSY A356L	Psychology of Learning Laboratory	
PSY A370	Behavioral Neuroscience	
PSY A375	Social Psychology	
Take six additional credits with a PSY prefix		6
Total Credits		18-19

A minimum of 18 credits, 6 of which must be upper division, is required for the minor.

Sociology

Social Sciences Building (SSB), Room 372, (907) 786-1665
www.uaa.alaska.edu/sociology (<http://www.uaa.alaska.edu/sociology>)

Sociology is the study of society, ranging from interactions in small groups to large-scale forces transforming entire civilizations. As a social science, sociology seeks to investigate human behavior using a range of quantitative and qualitative methods. Alaska is an ideal setting for the study of sociology due to the diversity of its people, its dynamic social landscape, and its distinct urban and rural ways of life. The UAA undergraduate sociology program prepares students to work collaboratively in organizations characterized by complexity, rapid change and high levels of cultural diversity.

The UAA Sociology Bachelor of Arts (BA) degree provides students with a strong foundation in sociological practice. For this degree, students must complete 37 credits in sociology courses including social theory, globalization, research methods, and a range of elective courses, two of which come from the department’s emphasis area in diversity and inequality. In addition to sociology courses and general education requirements, BA students will take courses in writing, ethics, and their choice of electives in humanities, fine arts, languages, or other social sciences. This degree is a good route for students interested in graduate school and/or a variety of careers in fields such as law, public policy, corrections, advocacy, social services, corporate communications, or education.

The Sociology Bachelor of Science (BS) degree provides training in sociology along with a focus on quantitative research methods. For this degree, students must complete 37 credits in sociology courses including demography, research methods, statistics, environmental sociology, social theory, and a range of elective courses, one of which comes from the department’s emphasis area in diversity and inequality. In addition to sociology courses and general education requirements, BS students will take courses in mathematics and statistics, writing, ethics, and their choice of electives in the natural sciences, health sciences, geomatics, geography, or environmental studies. This degree is a good route for students who are interested in graduate school and/or a variety of careers in applied research fields such as planning, marketing, or public health.

Our faculty study an assortment of topics that intersect with life in the North, including housing and environmental issues, globalization and culture, and urbanization and inequality. Our students are active in university and community life and have an excellent reputation for social science and policy research. Our alumni can be found in a range of fields including research, business, advocacy, public health, law enforcement, education and policy.

Programs of Study

Bachelor of Arts

- BA in Sociology (p. 160)

Bachelor of Science

- BS in Sociology (p. 161)

Minor

- Minor in Sociology (p. 162)

Faculty

Nelta Edwards, Professor, nmedwards@alaska.edu
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Zeynep Kiliç, Associate Professor, zkilic@alaska.edu
Karl Pfeiffer, Professor, ktpfeiffer@alaska.edu
John Riley, Associate Professor, jpriley@alaska.edu

Emeriti

Nancy Andes, Professor Emerita, nandes@alaska.edu
Sharon Araji, Professor Emerita, afska1@alaska.edu
Michael Pajot, Professor Emeritus, afmep@alaska.edu

Bachelor of Arts in Sociology

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Advising

All Sociology majors are strongly encouraged to meet with their faculty advisors each semester for the purpose of reviewing their academic progress and planning future courses. It is particularly important for students to meet with their faculty advisors when it appears that academic difficulties may arise.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the major requirements below.

Major Requirements

Code	Title	Credits
Core Sociology Courses (required)		
SOC A101	Introduction to Sociology	3
SOC A380	Sociology of Globalization	3
SOC A402	Social Theory	3
SOC A462	Social Science Statistics	4
SOC A488	Capstone Seminar	3
Research Methods		
Complete one of the following courses:		3
SOC A307	Demography	
SOC/PS A361	Social Science Research Methods	
Diversity and Inequality		
Complete two of the following courses:		6
SOC A309	Urban Sociology	
SOC A342	Marriages and Families	

SOC A363	Social Stratification	
SOC A377	Sociology of Gender	
SOC A408	Sociology of Race and Ethnicity	
Sociology Electives		
Complete an additional 12 sociology credits, of which 6 credits must be upper-division.		12
Foundations in Writing and Ethics		
WRTG A212	Writing and the Professions	3
or WRTG A213	Writing and the Sciences	
PHIL A301	Ethics	3
or PHIL A305	Professional Ethics	
Interdisciplinary Electives		
Complete one of the following courses:		3
AKNS A201	Alaska Native Perspectives	
CEL A292	Introduction to Civic Engagement	
ENGL A414	Research Writing	
HIST A377	Historiography: The Uses and Abuses of History	
HIST A390	Themes in World History	
HNRS A292	Honors Seminar in Social Science	
JPC A204	Media Literacy	
JUST A330	Justice and Society	
PS A324	Model United Nations	
PSY A375	Social Psychology	
SWK A243	Cultural Diversity and Community Service Learning	
WS A200	Introduction to Women's and Gender Studies	
Complete two courses in fine arts (ART, DNCE, MUS, THR) or complete an 8-credit sequence in a foreign/indigenous language.		6-8
Total Credits		52-54

A total of 120 credits is required for the degree, of which 42 credits must be upper-division.

Honors in Sociology

Students majoring in Sociology are eligible to graduate with departmental honors if they satisfy all of the following:

1. Meet all the requirements for a BA or BS degree in Sociology.
2. Maintain a grade point average of 3.50 or above in all Sociology courses.
3. Attain a score at or above the 90th percentile on the ETS Major Field Test or attain a score at or above the 85th percentile on the ETS Major Field Test and successfully complete an undergraduate research/service project resulting in a presentation at a conference, symposium, or community meeting.

Program Student Learning Outcomes

Students graduating with a Bachelor of Arts in Sociology will be able to:

- Demonstrate decision-making skills appropriate to evidence-based identification, understanding, and amelioration of social problems.
- Demonstrate fundamental technical proficiency in social science research in preparation for graduate level training or direct employment in professional fields utilizing the methods and analytical skills of the social sciences.
- Demonstrate ability to work collaboratively in preparation for work in organizations characterized by complexity, rapid change, and high levels of cultural diversity.

Bachelor of Science in Sociology

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Advising

All Sociology majors are strongly encouraged to meet with their faculty advisors each semester for the purpose of reviewing their academic progress and planning future courses. It is particularly important for students to meet with their faculty advisors when it appears that academic difficulties may arise.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the major requirements below.

Major Requirements

Code	Title	Credits
Core Sociology Courses (required)		
SOC A101	Introduction to Sociology	3
SOC A307	Demography	3
SOC/PS A361	Social Science Research Methods	3
SOC A402	Social Theory	3
SOC A404	Environmental Sociology	3
SOC A462	Social Science Statistics	4
SOC A488	Capstone Seminar	3
Diversity and Inequality		
Complete one of the following courses:		3
SOC A309	Urban Sociology	
SOC A342	Marriages and Families	
SOC A363	Social Stratification	
SOC A377	Sociology of Gender	
SOC A408	Sociology of Race and Ethnicity	

Sociology Electives

Complete an additional 12 sociology credits, of which 6 credits must be upper-division. 12

Foundations in Writing and Ethics

PHIL A302 Biomedical Ethics 3

or PHIL A303 Environmental Ethics

WRTG A213 Writing and the Sciences 3

Mathematics and Statistics

Complete two of the following courses: 6-8

MATH A121 College Algebra for Managerial and Social Sciences

MATH A151 College Algebra for Calculus

MATH A221 Applied Calculus for Managerial and Social Sciences

PSY A260 Statistics for Psychology

STAT A200 Elementary Statistics

STAT A253 Applied Statistics for the Sciences

STAT A307 Probability and Statistics

Interdisciplinary Electives

Complete one additional upper-division course in math, statistics, natural sciences (ASTR, BIOL, CHEM, GEOL, PHYS), health sciences, geomatics, geography or environmental studies. 3-4

Total Credits 52-55

A total of 120 credits is required for the degree, of which 42 credits must be upper-division.

Honors in Sociology

Students majoring in Sociology are eligible to graduate with departmental honors if they satisfy all of the following:

1. Meet all the requirements for a BA or BS degree in Sociology.
2. Maintain a grade point average of 3.50 or above in all Sociology courses.
3. Attain a score at or above the 90th percentile on the ETS Major Field Test OR attain a score at or above the 85th percentile on the ETS Major Field Test and successfully complete an undergraduate research/service project resulting in a presentation at a conference, symposium, or community meeting.

Program Student Learning Outcomes

Students graduating with a Bachelor of Science in Sociology will be able to:

- Demonstrate decision-making skills appropriate to evidence-based identification, understanding, and amelioration of social problems.
- Demonstrate fundamental technical proficiency in social science research in preparation for graduate level training or direct employment in professional fields utilizing the methods and analytical skills of the social sciences.

- Demonstrate ability to work collaboratively in preparation for work in organizations characterized by complexity, rapid change, and high levels of cultural diversity.

Minor in Sociology

Students majoring in another subject who wish to minor in sociology must complete the following requirements.

Code	Title	Credits
SOC A101	Introduction to Sociology	3
Complete one of the following:		3
SOC A201	Social Problems and Solutions	
SOC/JUST A251	Crime and Delinquency	
Complete one of the following:		3
SOC A309	Urban Sociology	
SOC A363	Social Stratification	
SOC A380	Sociology of Globalization	
Sociology electives, 6 credits of which must be upper division		9
Total Credits		18

A total of 18 credits is required for the minor.

Statistics

Social Sciences Building (SSB), Room 154, (907) 786-1744

www.uaa.alaska.edu/mathematics-and-statistics/statistics (<http://www.uaa.alaska.edu/mathematics-and-statistics>)

Statistical knowledge has become increasingly important in many disciplines such as natural and mathematical sciences, social sciences, education, engineering, health, and business. Students who gain expertise in statistics bolster their research skills and enhance their career opportunities. To help prepare such students, the Department of Mathematics and Statistics offers undergraduate courses that address statistical computations, theory of probability and statistics, statistical software packages, and a wide spectrum of statistical methods.

Faculty

Kanapathi Thiru, Professor, kthiru@alaska.edu

Rieken Venema, Professor, rvenema@alaska.edu

Theatre and Dance

Fine Arts Building (ARTS), Room 302, (907) 786-1792

www.uaa.alaska.edu/theatreanddance (<http://www.uaa.alaska.edu/theatreanddance>)

The Department of Theatre and Dance offers a well-rounded liberal arts approach in its curriculum. Theatre courses cover all the basic areas of theatrical endeavor, including acting, movement for the actor, directing, stagecraft, scenic design, lighting design, costume design and technology, makeup, dramatic literature, theatre history, dramatic theory and criticism, and playwriting. The dance program offers courses in dance techniques, choreography, improvisation, dance history and

dance research methods. Selected topics offered from time to time range from a diverse menu of performance and technical offerings such as practical applications in theatrical control systems, sound engineering, arts in education, touring youth theatre productions, and movement-violence and the text. Dance offers hip-hop, Capoeira, popular American social dance, dance for musical theatre as well as other contemporary styles.

Theatre is the art of giving life in performance to dramatic literature. Production is at the very center of our award-winning theatre and dance program. Each season the department produces three to four plays and two dance concerts on its “modified thrust” Mainstage and in the Jerry Harper Studio Theatre, a fully-equipped black-box space. Student-directed scenes, one-acts and full-length plays are also presented yearly in the Harper. Department plays are cast at open auditions and on average more than 100 majors, non-majors and members of the community are involved in our productions each year. All theatre and dance majors are required to participate in Mainstage productions and/or related departmental activities.

Dance as performance and as theoretical discourse from a multidisciplinary and multicultural perspective is primary in the dance program. As in theatre, production is also at the heart of the program, with the UAA Dance Ensemble as the core performing group. Each year, we feature two dance productions either on Mainstage and/or at the Harper Theatre, and guest artist residencies are a staple of the program. All dance minors or theatre majors choosing the dance option are required to participate in Dance Ensemble performances and/or related departmental activities.

Programs of Study

Bachelor of Arts

- BA in Theatre (p. 163)

Minors

- Minor in Dance (p. 165)

Faculty

Daniel Anteau, Professor/Chair, danteau@alaska.edu

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Nova Cunningham, Term Assistant Professor, ntcunningham@alaska.edu

Jill Flanders Crosby, Professor, jaflanderscrosby@alaska.edu

Tyson Hewitt, Assistant Professor, thewitt4@alaska.edu

Brian Jeffery, Term Assistant Professor, bjeffery2@alaska.edu

Colleen Metzger, Assistant Professor, cmetzger@alaska.edu

Emeriti

David Edgecombe, Professor Emeritus

Fran Lautenberger, Professor Emeritus

Bachelor of Arts in Theatre

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Academic Requirements

Admission Requirements to Upper-Division Courses

- Completion of any combination of at least 9 credits from the Tier 1 General Education Requirements (GERs) (p. 90) with a cumulative GPA of 2.25 or higher.
- All students must choose a concentration and complete each of the following courses from the chosen concentration with a grade of C or better in order to take upper-division classes.

Code	Title	Credits
Performance Concentration		
THR A121	Introduction to Acting	3
THR A131	Theatrical Production Techniques	3
THR A132	Introduction to Theatrical Design	3
THR A221	Movement for the Actor	3
THR A222	Voice for the Actor	3
Design and Technical Concentration		
THR A121	Introduction to Acting	3
THR A131	Theatrical Production Techniques	3
THR A132	Introduction to Theatrical Design	3
THR A141	Stagecraft I	3
Dance Concentration		
DNCE A121	Contemporary Modern I	2
DNCE A170	Dance Appreciation	3
DNCE A262	Theory and Improvisation	3
THR A121	Introduction to Acting	3
THR A131	Theatrical Production Techniques	3
THR A132	Introduction to Theatrical Design	3

Students in the Theatre and Dance program who do not meet the above standards may not take upper-division courses.

Conditional Admission to Upper-Division Courses

A student classified as being conditionally admitted to upper-division status may take upper-division THR and DNCE courses for one semester only while fulfilling division deficiencies with departmental approval.

Graduation Requirements

1. Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
2. Complete the General Education Requirements for Baccalaureate Degrees (p. 86).

3. Complete the College of Arts and Sciences Requirements (p.).
4. Complete the major requirements below.

Major Requirements

Mandatory Practicum Requirement

All theatre majors are required to take at least 1 credit of technical practicum per semester for the first three years. Students will meet with the department practicum coordinator to sign up for the semester practicum assignment. Practicum opportunities are available in (but not limited to) the areas of scene shop assistant, costume shop assistant, prop artist or artisan, light shop assistant, master electrician, master carpenter, assistant technical director, cutter/drafter, costume crafts, and student publicist assistant.

Code	Title	Credits
Core Courses		
THR A121	Introduction to Acting	3
THR A131	Theatrical Production Techniques	3
THR A132	Introduction to Theatrical Design	3
Choose one class from the design sequence:		3
THR A243	Scene Design	
or THR A257	Costume Design	
or THR A347	Lighting Design	
THR A295	Theatre Practicum: Technical	6
THR A306	Stage Management	3
THR A411	Theatre History and Theory I	3
THR A412	Theatre History and Theory II	3
THR A450	Resume and Portfolio Workshop	1
Total Credits		28

Choose one the following concentrations: performance, design and technical, or dance.

Code	Title	Credits
Performance Concentration		
THR A214	Historical Plays	3
or THR A215	Contemporary Plays	
THR A221	Movement for the Actor	3
THR A222	Voice for the Actor	3
THR A331	Directing I	3
Complete 12 credits from the following:		12
THR A315	Playwriting	
THR A322	Scene Study	
THR A325	Theatre Speech and Dialects	
THR A328	Acting Shakespeare	
THR A329	Combat for the Stage	
THR A435	Directing II	
THR A490	Selected Topics in Performance	
Total Credits		24

Code	Title	Credits
Design and Technical Concentration		
THR A141	Stagecraft I	3
Complete the remaining courses in the design sequence:		6
THR A214	Historical Plays	
or THR A215	Contemporary Plays	
THR A243	Scene Design	
THR A257	Costume Design	
THR A347	Lighting Design	
Complete 12 credits from the following:		12
THR A341	Advanced Theatre Technologies	
THR A343	Scenic Design II	
THR A345	Theatrical Properties: Design and Construction	
THR A350	Costume Crafts	
THR A357	Costume Construction	
THR/ART A376	CAD for the Arts	
THR A491	Selected Topics in Technical Theatre	
Total Credits		21

Code	Title	Credits
Dance Concentration		
DNCE A121	Contemporary Modern I	2
DNCE A170	Dance Appreciation	3
DNCE A262	Theory and Improvisation	3
DNCE A361	Approaches to Dance Composition	3
DNCE A395	Advanced Practicum: Performance	2
Complete 11 credits from the following with 4 credits at or above the 200 level:		11
DNCE A101	Fundamentals of Ballet I	
DNCE A121	Contemporary Modern I	
DNCE/THR A124	Dance for Musical Theatre I	
DNCE A131	Fundamentals of Music-Based Jazz I	
DNCE A147	Popular American Social Dance	
DNCE A148	Hip Hop and Street Dance Styles I	
DNCE A151	Fundamentals of Tap I	
DNCE A223	Contemporary Modern II	
DNCE/THR A224	Dance for Musical Theatre II	
DNCE A290	Selected Topics in Dance	
DNCE A321	Intermediate Contemporary Modern I	
DNCE A322	Intermediate Contemporary Modern II	
DNCE A365	Dance Repertory and Performance I	
DNCE A395	Advanced Practicum: Performance	
DNCE A465	Advanced Performance and Choreography Workshop	

DNCE A475	Dance Repertory and Performance II	
DNCE A490	Selected Topics in Dance	
THR A221	Movement for the Actor	
Total Credits		24

A total of 120 credits is required for the degree, of which 42 credits must be upper division.

Honors in Theatre

Students majoring in theatre are eligible to graduate with departmental honors if they satisfy all of the following requirements:

1. Meet the requirements for a BA in Theatre.
2. Maintain a grade point average of 3.50 or above in theatre courses applicable to the major requirements.
3. Complete THR A498 with a minimum grade of B prior to enrolling in THR A499.
4. Complete THR A499 with a minimum grade of B. The thesis project must be approved in writing in advance by the department faculty and be completed in the senior year. The project must culminate in a public performance or presentation.
5. Students intending to graduate with departmental honors must notify the department in writing at least one year prior to filing their Application for Graduation with the Office of the Registrar.

Program Student Learning Outcomes:

Students graduating with a Bachelor of Arts in Theatre with a Theatre or Dance option will be able to:

- Translate creative skills and techniques into performance and/or related technical production areas.
- Demonstrate integral collaborative communication skills fundamental to performance and/or related technical production areas.
- Demonstrate theories based on the historical and cultural foundations of theatre, dance and production.
- Analyze artistic works within an informed critical framework through a variety of contexts and formats such as artistic creation, performance, production and critical analysis.

Minor in Dance

Students majoring in another subject who wish to minor in dance must complete the following requirements. Theatre majors with a dance concentration are not eligible for the Minor in Dance.

Code	Title	Credits
DNCE A170	Dance Appreciation	3
DNCE A262	Theory and Improvisation	3
DNCE A361	Approaches to Dance Composition	3
DNCE A370	Interdisciplinary Dance Studies: Issues and Methods	3
DNCE A395	Advanced Practicum: Performance	2

THR A131	Theatrical Production Techniques	3
Choose 4 more credits of the following:		4
DNCE A101	Fundamentals of Ballet I	
DNCE A121	Contemporary Modern I	
DNCE/THR A124	Dance for Musical Theatre I	
DNCE A131	Fundamentals of Music-Based Jazz I	
DNCE A147	Popular American Social Dance	
DNCE A151	Fundamentals of Tap I	
DNCE A223	Contemporary Modern II	
DNCE/THR A224	Dance for Musical Theatre II	
DNCE A321	Intermediate Contemporary Modern I	
DNCE A322	Intermediate Contemporary Modern II	
DNCE A365	Dance Repertory and Performance I	
DNCE A465	Advanced Performance and Choreography Workshop	
DNCE A475	Dance Repertory and Performance II	
Total Credits		21

A total of 21 credits is required for the minor.

Women's Studies

Social Sciences Building (SSB), Room 355, (907) 786-4837

www.uaa.alaska.edu/womensstudies (<http://www.uaa.alaska.edu/womensstudies>)

The interdisciplinary Women's Studies Minor offers students the opportunity to select courses from a variety of academic disciplines. Women's studies courses are planned to foster open, vigorous inquiry about women; to challenge curricula in which women are absent or peripheral; to question cultural assumptions in light of new information; and to create a supportive environment for those interested in studying women.

Program of Study

Minor

- Minor in Women's Studies (p. 165)

Faculty

*Tara Lampert, Adjunct Instructor, tlampert@alaska.edu
Kimberly J. Pace, Term Assistant Professor/Coordinator, kjpace@alaska.edu*

Minor in Women's Studies

Students majoring in another subject who wish to minor in women's studies must complete the following requirements.

Code	Title	Credits
WS A200	Introduction to Women's and Gender Studies	3
WS A400	Feminist Theory	3
WS A401	Seminar in Women's Studies *	3
Pre-Approved Electives **		
Complete 9 credits of the following:		9
ENGL A404	Topics in Women's Literature	
HUMS A350	Men and Masculinity Issues in Human Services Practice	
PSY A313	Psychology of Women	
SOC A242	Introduction to Family, Marriage, and Intimate Relationships	
SOC A342	Marriages and Families	
SOC A377	Sociology of Gender	
WS/SOC A252	Women and Social Action	
WS/PS A355	Women in Politics	
WS A401	Seminar in Women's Studies *	
Total Credits		18

* WS A401 may be taken a second time with a change of subtitle as an elective.

** Students must select electives from at least two different disciplines (as defined by prefix). At least one elective must be upper division (300 level or higher). Relevant courses not listed as approved electives may apply with the approval of Women's Studies chair.

A total of 18 credits is required for the minor, of which 9 must be upper division. Other courses may apply to the minor with approval of the Women's Studies Department chair.

Program Student Learning Outcomes

Students who complete this minor will be able to:

- Demonstrate knowledge of the basic history of issues critical to the study of women's issues both nationally and internationally.
- Demonstrate effective communication skills in both written and oral formats.
- Demonstrate critical thinking about the field of Women's Studies, including cross disciplinary boundaries, solve problems and produce original work.
- Demonstrate knowledge of the various theoretical frameworks within the field of Women's Studies.

College of Business and Public Policy

www.business.uaa.alaska.edu

The College of Business and Public Policy (CBPP) at the University of Alaska Anchorage (UAA) prepares students for leadership at the frontiers of a changing world. We help diverse and growing communities in Alaska and elsewhere meet their challenges by

delivering the highest quality in business and public policy education, research, and professional assistance.

CBPP serves Alaska and global communities by training and educating the workforce, and promoting excellence in public, private, and nonprofit management and related business disciplines. CBPP faculty also conduct applied and pedagogical research and provide professional assistance to public, private, and nonprofit organizations. CBPP offers a range of degree and certificate programs including:

- Occupational Endorsement Certificate (OEC) in Logistics and Supply Chain Operations
- One-Year Certificate in Logistics and Supply Chain Operations
- Associate of Applied Science (AAS) degrees in Accounting, Business Computer Information Systems, General Business, Logistics and Supply Chain Operations, and Small Business Administration
- Bachelor of Business Administration (BBA) in Accounting, Economics, Finance, Global Logistics and Supply Chain Management, Management (with the option of a Property Management and Real Estate concentration), Management Information Systems, and Marketing
- Bachelor of Arts (BA) in Economics
- Master of Business Administration (MBA) in General Management
- Master of Public Administration (MPA) in Public Administration
- Master of Science (MS) in Global Supply Chain Management

The college has four departments — Accounting and Finance, Management and Marketing, Information Systems and Decision Sciences, Economics and Public Policy — and more than 40 full-time faculty members with graduate degrees from some of higher education's most prestigious business programs. Many also have extensive professional executive experience, which enhances the relevance and timeliness of CBPP's curricula. The college maintains a small-school atmosphere, while featuring top-notch faculty, research and academic opportunities for students.

The Association to Advance Collegiate Schools of Business (AACSB International) accredits CBPP's Bachelor of Business Administration (including Accounting), Bachelor of Arts in Economics, Master of Business Administration, and Master of Science in Global Supply Chain Management degrees. AACSB-accredited schools are recognized as the top business schools in the world. AACSB accreditation makes certain the UAA College of Business and Public Policy provides a rigorous, credible and competitive education. It also assures employers that CBPP graduates are ready to perform on day one. AACSB accreditation attracts higher quality faculty and students by enhancing the reputation of the institution and its graduates.

CBPP oversees the Center for Economic Education (CEE), the Alaska Center for Supply Chain Integration (ACSCI), and the Institute of Social and Economic Research (ISER), which also houses the Center for Alaska Education Policy Research (CAEPR) and the Center for Behavioral Health Research and Services (CBHRS). The Dean's Executive Advisory Council includes more than a dozen top executives representing leading employers in Alaska and the northwest United

States. Many local and national firms offer scholarships, internships and job opportunities for CBPP students.

CBPP embraces the university's mission to serve Alaska and the global community (with specific focus on the North Pacific Rim) and maintains an environment that values, promotes, develops and fosters equal treatment of cultural and ethnic groups. CBPP prepares students to meet the ethical, environmental and moral challenges facing future business leaders. Programs are designed to advance critical thinking and behavioral and communication skills. The faculty is attentive to advances in information technology for educating business students and is committed to maintaining state-of-the-art computer laboratory facilities. CBPP serves a student body that is diverse in its social and educational background, business and professional experience, learning styles, and educational and career ambitions. CBPP students frequently finish at the top of business competitions in which rivals include Ivy League and other renowned educational institutions. The college's alumni consistently lead some of Alaska's largest companies and are noteworthy contributors to the economies of the state and region.

CBPP Bachelor of Business Administration Requirements

Students earning a BBA must complete at least 50 percent of their required business credits at UAA. All ACCT, BA, CIS, ECON, LGOP and LOG courses are considered business credits for the purpose of this requirement.

The following courses must be completed with a grade of C or better.

Code	Title	Credits
BBA Lower-Division Core		
ACCT A201 or ACCT A101 & ACCT A102	Principles of Financial Accounting Principles of Financial Accounting I and Principles of Financial Accounting II	3-6
ACCT A202	Principles of Managerial Accounting	3
BA A151	Business Foundations	3
BA A273	Introduction to Statistics for Business and Economics	3
CIS A110	Computer Concepts in Business	3
CIS A280	Managerial Communications	3
ECON A201	Principles of Macroeconomics	3
ECON A202	Principles of Microeconomics	3
WRTG A212	Writing and the Professions	3
MATH A121 or MATH A151	College Algebra for Managerial and Social Sciences College Algebra for Calculus	3-4
Upper-Division Core		
ACCT A316 or CIS A376	Accounting Information Systems II Management Information Systems	3
BA A300	Organizational Theory and Behavior	3
BA A325	Corporate Finance	3

BA A343	Principles of Marketing	3
BA A377	Operations Management	3
BA A388	Globalization and Business Environment	3
BA A462	Strategic Management	3
Total Credits		51-55

* Accounting majors must take ACCT A316. All other majors must take CIS A376.

CBPP Admission Requirements to Upper-Division Courses

1. Completion of at least 39 credits with a cumulative GPA of 2.25 or higher.
2. Completion of the BBA lower-division core courses with a grade of C or better.
3. Completion of the following courses with a grade of C or better.

Code	Title	Credits
One of the following:		3
WRTG A111	Writing Across Contexts	
WRTG A1W	Written Communication GER	
COMM A111 or COMM A241	Fundamentals of Oral Communication Public Speaking	3
Completion of any combination of at least 9 credits in the following General Education Requirement disciplinary areas:		9
Fine Arts		
Humanities		
Natural Sciences		

Admission to Upper-Division Status

BBA students who do not meet the above standards may not take upper-division courses in ACCT, BA, CIS, ECON and LOG. Please contact the CBPP Student Advising Center (907-786-4100) for assistance in applying for admission to upper-division standing within the College of Business and Public Policy.

Non-BBA students who meet course prerequisites may take up to 15 upper-division ACCT, BA, CIS, ECON and LOG credits without being formally admitted to a BBA program. All students must apply for admission to a BBA program before accumulating more than 15 such credits. Please contact the CBPP Student Advising Center (907-786-4100) for assistance in registering.

Conditional Admission to Upper-Division Status

A student classified as being conditionally admitted to upper-division status may take upper-division ACCT, BA, CIS, ECON and LOG courses for *one semester only* while completing lower-division requirements.

Accounting and Finance

Edward & Cathryn Rasmuson Hall (RH), Room 203, (907) 786-4100
business.uaa.alaska.edu/departments/accounting-finance/ (<https://business.uaa.alaska.edu/departments/accounting-finance/>)

The Department of Accounting and Finance is committed to enhancing lifelong learning skills to encourage responsible citizenship and personal satisfaction.

The Bachelor of Business Administration (BBA) in Accounting and Associate of Applied Science (AAS) in Accounting prepare students for careers in business, government or non-profit organizations. Accounting is often referred to as the "language of business" because it communicates economic information to decision-makers. Every business organization, non-profit entity and governmental agency requires accounting information to operate and perform successfully.

The BBA in Accounting is offered through the Anchorage campus and gives students a broad-based business background and provides a solid foundation for careers in public accounting, private accounting, and accounting for government or non-profit organizations. The program also provides a foundation for graduates to pursue additional professional certifications, including, but not limited to, the Certified Public Accountant (CPA), Certified Fraud Examiner (CFE), and Certified Management Accountant (CMA) designations.

The AAS in Accounting prepares students for entry-level accounting positions such as bookkeeper, accounts receivable, accounts payable and payroll clerk; assistant to line and staff accountants; or paraprofessionals in CPA firms. The program emphasizes understanding the accounting cycle, processes and procedures, as well as generally accepted accounting principles. UAA offers the AAS in Accounting through UAA's Anchorage, Kodiak and Matanuska-Susitna campuses.

AAS students who plan to also earn a BBA degree in Accounting should take General Education Requirement (p. 86) (GER) courses. To ensure applicability to a BBA degree, students are encouraged to meet with an academic advisor for the best transition possible.

The BBA in Finance prepares students for entry-level financial management jobs in corporations, non-profit organizations and financial institutions; financial analysis with brokerage and money management firms; financial planning services; and financial consulting to small business. Furthermore, it prepares students for graduate studies in finance.

Students gain knowledge about concepts of financial planning, analysis and management in a global context; functions, structures, delivery systems, efficiency and performance of financial markets and institutions; concepts, techniques and strategies of investment in financial and real assets; creation of values for the stockbrokers, stakeholders and society; and the value of financial securities and the enterprise.

Programs of Study

Associate of Applied Science

- AAS in Accounting (p. 168)

Bachelor of Business Administration

- BBA in Accounting (p. 169)
- BBA in Finance (p. 170)

Minor

- Minor in Accounting (p. 170)

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Associate of Applied Science in Accounting

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degrees (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83) (15 credits). Complete 6 credits selected from the humanities, mathematics and natural sciences, or social sciences General Course Requirement classification list, other than BA A151, ECON A201 and MATH A105.
 - To provide maximum transferability to the BBA in Accounting, it is recommended that students consider the Bachelor of Business Administration General Education Requirements and business core requirements when selecting courses to fulfill the Associate of Applied Science General Course Requirements and business electives.

- Complete the program requirements below with a grade of C or better.

Program Requirements

Code	Title	Credits
ACCT A101	Principles of Financial Accounting I	3
ACCT A102	Principles of Financial Accounting II	3
ACCT A202	Principles of Managerial Accounting	3
ACCT A210	Income Tax Preparation	3
ACCT A222	Introduction to Computerized Accounting	3
ACCT A225	Payroll Accounting	3
ACCT A230	Workpaper Preparation and Presentation	3
BA A151	Business Foundations	3
BA/JUST A241	Business Law I	3
CIS A110	Computer Concepts in Business	3
ECON A201	Principles of Macroeconomics	3
MATH A105	Intermediate Algebra *	3
Complete 9 credits of electives. Students may choose any course at the 100 level or above in ACCT, BA, CIS, CIOS, ECON or LOG but may not choose more than 6 credits from one discipline and may not use ACCT A120. **		9
Total Credits		45

* Any higher-level MATH course, except MATH A115, with a minimum grade of C will satisfy the MATH A105 requirement.

** Students using CIOS A260A to meet the written communication skills General Course Requirement may not also apply it as an elective course for this program. Students using an ECON course to meet the social sciences General Course Requirement may not also apply it as an elective course for this program.

A total of 60 credits is required for the degree.

Program Student Learning Outcomes

Students graduating with an Associate of Applied Science in Accounting will be able to:

- Demonstrate the ability to provide written documentation summarizing accounting information in an organized manner.
- Demonstrate the ability to apply the fundamental accounting equation in the analysis and recording of business transactions and understand the concepts underlying the preparation of financial statements.
- Demonstrate the ability to use special journals and subsidiary ledgers in the analysis and recording of business transactions.
- Demonstrate an understanding of state and federal payroll tax laws and properly calculate, record, and report payroll transactions for an organization.

- Demonstrate an understanding of fundamental income tax laws and prepare an individual income tax return.
- Demonstrate competency using computer technology in the accounting processing cycle.

Bachelor of Business Administration in Accounting

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the CBPP Bachelor of Business Administration Requirements. (p. 167)
- Complete the major requirements below with a grade of C or better.

Major Requirements

Code	Title	Credits
ACCT A216	Accounting Information Systems I	3
ACCT A301	Intermediate Accounting I *	3
ACCT A302	Intermediate Accounting II *	3
ACCT A342	Managerial Cost Accounting	3
ACCT A409	Individual Income Tax	3
or ACCT A410	Corporate and Partnership Income Tax	
ACCT A452	Auditing	3
BA/JUST A241	Business Law I	3
MATH A221	Applied Calculus for Managerial and Social Sciences	3-4
or MATH A251	Calculus I	

Select 6 credits of upper-division accounting electives from the following: 6

ACCT A401	Advanced Accounting	
ACCT A409	Individual Income Tax **	
ACCT A410	Corporate and Partnership Income Tax **	
ACCT A420	Fraud Examination	
ACCT A430	Governmental and Not-for-Profit Accounting	
Choose one of the following:		3
BA A375	Statistics for Business and Economics	

Upper-division ECON elective

* ACCT A301 and ACCT A302 must be completed at the University of Alaska Anchorage or another AACSB-accredited institution.

** These courses may not be used to fulfill multiple requirements.

A total of 120 credits is required for the degree, of which 45 credits must be upper-division.

Licensure and/or Certification

Students who complete UAA's Bachelor of Business Administration in Accounting meet the educational requirement to sit for the examination for certified public accountants in the State of Alaska. Additional coursework is required to become a Certified Public Accountant (CPA) in the State of Alaska. Visit the State of Alaska Department of Commerce, Community and Economic Development Board of Public Accountancy's website (<https://www.commerce.alaska.gov/web/cbpl/professionallicensing/boardofpublicaccountancy.aspx>) for the complete list of requirements for licensure in Alaska.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice. Requirements to become a CPA are unique to each state. Visit the website (<https://nasba.org/stateboards>) for the National Association of State Boards of Accountancy (NASBA) for more information.

Program Student Learning Outcomes

Students graduating with a Bachelor of Business Administration in Accounting will be able to demonstrate:

- A baccalaureate content knowledge of the Accounting discipline.
- Knowledge of local, state, and global perspectives in business.
- Ability to apply analytical thinking.
- Skills in professional interactions and human relations.

Bachelor of Business Administration in Finance

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the CBPP Bachelor of Business Administration Requirements. (p. 167)
- Complete the Major Requirements below with a grade of C or better.

Major Requirements

Code	Title	Credits
BA/JUST A241	Business Law I	3
BA/JUST A242	Business Law II	3
BA A375	Statistics for Business and Economics	3
or ECON A312	Econometrics for Business and Economics	
or ECON A329	Economic and Business Forecasting	
BA A380	Investment Management	3
BA A385	Intermediate Financial Management	3
MATH A251	Calculus I	3-4
or MATH A221	Applied Calculus for Managerial and Social Sciences	
Complete at least 12 credits from the following:		12
BA A426	Financial Institutions	
BA A427	International Finance	
BA A451	Advanced Investment Strategies	
BA A452	Financial Derivatives	
BA A453	Bond Market Analysis	
Complete 6 credits of upper division business electives in ACCT, BA, CIS, ECON or LOG		6

A total of 120 credits is required for the degree, of which a minimum of 48 credits must be upper-division.

Program Student Learning Outcomes

Students graduating with a Bachelor of Business Administration in Finance will be able to demonstrate:

- A baccalaureate content knowledge of the Finance discipline.
- Knowledge of local, state, and global perspectives in business.
- Ability to apply analytical thinking.
- Skills in professional interactions and human relations.

Minor in Accounting

Students who wish to minor in accounting must complete the following requirements with a grade of C or better. This minor is not available to BBA Accounting majors.

Code	Title	Credits
ACCT A201	Principles of Financial Accounting	3
ACCT A202	Principles of Managerial Accounting	3
ACCT A216	Accounting Information Systems I	3
ACCT A301	Intermediate Accounting I *	3
ACCT A302	Intermediate Accounting II *	3

Upper division Accounting electives	6
Total Credits	21

* ACCT A301 and ACCT A302 must be completed at UAA or another AACSB-accredited institution.

A total of 21 credits is required for the minor.

Economics and Public Policy

Edward & Cathryn Rasmuson Hall (RH), Room 203, (907) 786-4100
business.uaa.alaska.edu/departments/economics-public-policy/
[\(https://business.uaa.alaska.edu/departments/economics-public-policy\)](https://business.uaa.alaska.edu/departments/economics-public-policy/)

Economics provides students with a systematic way of understanding the world around them. Economics is a social science that studies human behavior, markets, and how people, organizations and governments make choices about the use of resources. A degree in economics gives students career opportunities in many fields and excellent preparation for postgraduate study. The Economics Department hosts an experimental economics lab and an experimental economics research program. It has also has special expertise in behavioral economics and resource economics. It is home to the Rasmuson Chair in Economics, the only fully privately-endowed, scholarly chair at the University of Alaska, which brings leading economics scholars to be in residence at UAA for terms up to a year. It offers courses for both degree and non-degree-seeking students at the undergraduate and graduate levels. Students who wish to major in economics may choose either the Bachelor of Arts (BA) or Bachelor of Business Administration (BBA). A Minor in Economics is also offered.

Programs of Study

Bachelor of Arts

- BA in Economics (p. 171)

Bachelor of Business Administration

- BBA in Economics (p. 172)

Minor

- Minor in Economics (p. 172)

Faculty

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Bachelor of Arts in Economics

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the major requirements below.

Major Requirements

Code	Title	Credits
Complete the following with a grade of C or better:		
BA A273	Introduction to Statistics for Business and Economics	3
ECON A201	Principles of Macroeconomics	3
ECON A202	Principles of Microeconomics	3
ECON A312	Econometrics for Business and Economics	3
ECON A321	Intermediate Microeconomics	3
ECON A324	Intermediate Macroeconomics	3
ECON A492	Seminar in Economic Research	3
MATH A221	Applied Calculus for Managerial and Social Sciences *	3-4
	or MATH A251 Calculus I	
Upper-division ECON electives (including a minimum of 3 credits at the 400 level) **		15

* Math skills are important in the study of economics. For this reason, majors are to complete their math requirements early in their program. Students planning on graduate school are advised to take the entire calculus sequence (MATH A251, MATH A252 and MATH A253).

** No more than a total of 6 credits earned in an independent study, or ECON A454, may be used to satisfy requirements for the major (6 credits of independent study or 3 credits of independent study and 3 credits of ECON A454).

Students must complete at least 12 credits of their economics courses in residence at UAA.

A total of 120 credits is required for the degree, of which 51 credits must be upper-division.

Honors in Economics

Students majoring in economics are eligible to graduate with departmental honors if they satisfy all of the following requirements:

1. Meet requirements for BA or BBA in Economics.
2. Maintain a GPA of 3.50 in their major requirements.
3. Complete ECON A492 with a grade of A, or complete a research paper with a grade of A which demonstrates independent economic research in a semester-length independent study course.
4. Receive an honors score on a comprehensive examination for economics majors.

Students not meeting all these requirements may be awarded honors through a vote of the faculty.

Program Student Learning Outcomes

Students graduating with a Bachelor of Arts in Economics will be able to:

- Demonstrate the economic way of thinking and apply it to a wide variety of issues and problems.
- Use economic concepts and analytical skills to address economic problems.
- Demonstrate a basic descriptive knowledge of the U.S. and world economies.
- Understand the role of institutions, especially markets and government, in shaping economic outcomes.
- Obtain and analyze relevant economic data to test hypotheses against evidence.

Bachelor of Business Administration in Economics

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the CBPP Bachelor of Business Administration Requirements. (p. 167)
- Complete the major requirements below with a grade of C or better.

Major Requirements

Code	Title	Credits
BA/JUST A241	Business Law I	3
ECON A312	Econometrics for Business and Economics	3
ECON A321	Intermediate Microeconomics	3
ECON A324	Intermediate Macroeconomics	3

ECON A492	Seminar in Economic Research	3
MATH A221	Applied Calculus for Managerial and Social Sciences	3-4
or MATH A251	Calculus I	
Upper-division ECON electives (including a minimum of 3 credits at the 400 level) *		15

* No more than a total of 6 credits of independent study or ECON A454 may be used to satisfy the major requirements (6 credits of independent study or 3 credits of independent study and 3 credits of ECON A454).

A total of 120 credits is required for the degree, of which a minimum of 48 credits must be upper-division.

Program Student Learning Outcomes

Students graduating with a Bachelor of Business Administration in Economics will be able to demonstrate:

- A baccalaureate content knowledge of the Economics discipline.
- Knowledge of local, state, and global perspectives in business.
- Ability to apply analytical thinking.
- Skills in professional interactions and human relations.

Minor in Economics

Students majoring in another subject who wish to minor in economics must complete the following requirements.*

Code	Title	Credits
ECON A201	Principles of Macroeconomics	3
ECON A202	Principles of Microeconomics	3
Any Economics elective (100-400)		3
Upper division Economics electives		9
Total Credits		18

* Not available to BA and BBA Economics majors.

A total of 18 credits is required for the minor; 9 credits must be upper-division.

Information Systems and Decision Sciences

Edward & Cathryn Rasmuson Hall (RH), Room 203, (907) 786-4100
business.uaa.alaska.edu/departments/isds/ (<https://business.uaa.alaska.edu/departments/isds/>)

Today, more and more information is needed to manage organizations, large and small. From the entrepreneur to the large multinational corporation, managers are looking for the right information in the right format provided at just the right time to make effective decisions. The Information Systems and Decision Sciences (ISDS) Department provides educational opportunities through coursework, internship

opportunities with business and government partners, community-engaged projects, and work within CBPP computing laboratories.

Courses involving computer instruction, quantitative analysis, operations management, global logistics and supply chain management as well as many other business courses are supported by seven computerized classrooms and open laboratory facilities. These classrooms provide students with hands-on learning experiences using software and tools for business information systems integration, development and decision making. Special laboratories include multimedia presentation and advanced networking and information security facilities.

The ISDS Department offers Bachelor of Business Administration (BBA) degrees in Management Information Systems (MIS) and Global Logistics and Supply Chain Management (GLSCM), as well as an Associate of Applied Science (AAS) degree in Business Computer Information Systems (BCIS).

The BBA in MIS and AAS in BCIS are designed to prepare students for careers in business computer programming, system analysis and design, e-commerce, web design, end-user computing, information systems project management, databases and networks, and associated occupations. Both degrees are based on the Association of Information Technology Professionals (AITP) model curriculum and are designed so the diligent student can move from the two-year to four-year degree without losing credits. A Minor in Computer Information Systems is also available for non-MIS students wanting to strengthen their information systems knowledge.

Faculty introduce relevant theories, followed by hands-on experience with associated business applications. Both degrees emphasize using computing technology within business and public sector settings using engaged teaching methods, and include techniques and best practices related to managing information resources. Students are also able to focus on the technical and security aspects of diverse computing environments.

The BBA in Global Logistics and Supply Chain Management offers students the opportunity to study in a growing and exciting field. Logistics refers to moving material and personnel into and within a business, and distributing final products to customers. Students without significant logistics experience will need to complete a logistics internship.

The program introduces timely delivery, competitive pricing, mobility, and flexibility, together with innovative transportation services. Companies that master information technology and logistics are setting global standards for overall supply chain performance. Firms gain a competitive advantage by developing a worldwide logistics view and incorporating productive and efficient systems.

Programs of Study

Associate of Applied Science

- AAS in Business Computer Information Systems (p. 173)

Bachelor of Business Administration

- BBA in Global Logistics and Supply Chain Management (p. 174)
- BBA in Management Information Systems (p. 175)

Minor

- Minor in Computer Information System (p. 176)

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Associate of Applied Science in Business Computer Information Systems

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Advising

English and math placement tests are given by the Testing Center. A faculty advisor can assist students by recommending the proper levels of entry and appropriate CIS course plan. Students who are not proficient in typing (a minimum of 30 words per minute) should enroll in CIOS A101A. Students must be able to read and comprehend technical manuals and texts.

Academic Requirements

A grade of C or better is required to continue in each higher CIS course. To take upper-division CIS courses, students must complete lower-division degree requirements and apply for upper-division standing.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83) (15 credits). WRTG A212 is recommended. For the General Course Requirements, it is strongly recommended that students select 6 credits from humanities, math and natural sciences, or social sciences that also meet the baccalaureate General Education Requirements.
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
Breadth Requirements		
ACCT A201	Principles of Financial Accounting *	3
ACCT A202	Principles of Managerial Accounting	3
CIS A110	Computer Concepts in Business	3
ECON A201	Principles of Macroeconomics	3
ECON A202	Principles of Microeconomics	3
MATH A121	College Algebra for Managerial and Social Sciences	3-4
or MATH A151	College Algebra for Calculus	
General Education Requirement elective **		3

Business Core Requirement

BA A273	Introduction to Statistics for Business and Economics	3

CIS Required Courses

CIS A210	Contemporary Business Applications Development	3
CIS A310	Analysis of Business Systems	3
CIS A330	Database Management Systems	3
CIS A345	Managing Data Communications and Computer Networks	3

Electives

Complete 9 elective credits approved by a CIS Department advisor. (No more than 3 credits of internship can be used to fulfill program electives)	9

* The ACCT A101 and ACCT A102 sequence may be used to satisfy the ACCT A201 requirement for this degree.

** Choose a humanities or natural sciences course that meets both the AAS General Course Requirements and baccalaureate General Education Requirements.

A minimum of 12 credits from the CIS required courses and electives listed above must be earned at UAA.

A total of 60-61 credits is required for the degree.

Program Student Learning Outcomes

Students graduating with an Associate of Applied Science in Business Computer Information Systems will be able to:

- Design, code, test, compile, and debug programs for basic business functions utilizing a popular programming language.
- Perform a business analysis to identify business functional requirements as input for information technology application development.
- Demonstrate skills in analyzing, designing, building, and administering business-oriented databases.

- Explain the fundamentals of our rapidly changing environment of data communications over local area networks and over switched and private voice lines.
- Demonstrate skills in installing, configuring, and debugging a small local area network.
- Demonstrate competency in utilizing computer technology.

Bachelor of Business Administration in Global Logistics and Supply Chain Management

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the CBPP Bachelor of Business Administration Requirements (p. 167).
- Complete the major requirements below with grade of C or better.

Major Requirements

Code	Title	Credits
BA/JUST A241	Business Law I	3
LOG A378	Foundations of Logistics and Supply Chain Management	3
LOG A379	Transportation Management	3
LOG A415	Purchasing Management	3
LOG A416	International Logistics and Transportation Management	3
LOG A417	Materials Management	3
LOG A495	Internship in Global Logistics and Supply Chain Management *	3
MATH A221	Applied Calculus for Managerial and Social Sciences	3-4
or MATH A251	Calculus I	

Complete 9 credits of upper division electives approved by the student's advisor. Courses may include, but are not limited to, the following:

ACCT A342	Managerial Cost Accounting
ATP A332	Transport Aircraft Systems
BA A347	International Marketing
BA A375	Statistics for Business and Economics
BA A383	Market Research: Methods, Metrics and Strategies
CIS A310	Analysis of Business Systems
CIS A330	Database Management Systems

CIS A410	Project Management
CIS A489	Systems Design, Development and Implementation
ECON A312	Econometrics for Business and Economics
ECON A363	International Economics
ECON A329	Economic and Business Forecasting

* LOG A495 is intended to be in logistics and/or supply chain management. This requirement may be waived if the major advisor determines that the student already has significant logistics work experience. If waived, the student will need to select 3 additional upper-division credits to total 45.

A total of 120 credits is required for the degree, of which a minimum of 48 credits must be upper-division.

Honors in Global Logistics and Supply Chain Management

Students majoring in GLSCM are eligible to graduate with departmental honors if they satisfy all of the following requirements:

1. Meet requirements for BBA in Global Logistics and Supply Chain Management.
2. Maintain a GPA of 3.50 or above in their major requirements.

Program Student Learning Outcomes

Students graduating with a Bachelor of Business Administration in Global Logistics and Supply Chain Management will be able to demonstrate:

- A baccalaureate content knowledge of the Global Logistics and Supply Chain Management discipline.
- Knowledge of local, state, and global perspectives in business.
- Ability to apply analytical thinking.
- Skills in professional interactions and human relations.

Bachelor of Business Administration in Management Information Systems

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).

- Complete the CBPP Bachelor of Business Administration Requirements (p. 167).
- Complete the major requirements below with a grade of C or better.

Major Requirements

Code	Title	Credits
BA/JUST A241	Business Law I	3
CIS A210	Contemporary Business Applications Development	3
CIS A310	Analysis of Business Systems	3
CIS A330	Database Management Systems	3
CIS A345	Managing Data Communications and Computer Networks	3
CIS A410	Project Management	3
CIS A489	Systems Design, Development and Implementation	3
MATH A221 or MATH A251	Applied Calculus for Managerial and Social Sciences Calculus I	3-4

Complete 12 credits of upper division program electives approved by the department. Courses may include, but are not limited to, the following:

CIS A350	Advanced Web Page Development for Business Applications
CIS A361	Advanced Contemporary Business Applications Development
CIS A390	Selected Topics in Management Information Systems
CIS A395	Programmer/Analyst Internship
CIS A430	Client-Server Programming for Business Applications
CIS A445	Advanced Network Management
CIS A460	Web Development in the .Net Environment
CIS A470	Data Warehouses and Business Intelligence
CIS A495	Systems Analyst/User Support Internship
CIS A498	Individual Research Project
ECON A312	Econometrics for Business and Economics
ECON A329	Economic and Business Forecasting

A minimum of CIS A489 and 9 credits of major requirements must be completed at the University of Alaska Anchorage.

A total of 120 credits is required for the degree, of which a minimum of 48 credits must be upper-division.

Honors in Management Information Systems

Students majoring in Management Information Systems (MIS) are eligible to graduate with departmental honors if they satisfy item 1 and either item 2 or item 3.

1. Meet requirements for BBA in MIS.
2. Maintain a GPA of 3.50 in their major requirements.
3. Receive a technical award in the AITP's (Association of Information Technology Professional) National Collegiate Competition or a technical award in the National Collegiate Cyber Defense Competition.

Program Student Learning Outcomes

Students graduating with a Bachelor of Business Administration in Management Information Systems will be able to demonstrate:

- A baccalaureate content knowledge of the Management Information Systems discipline.
- Knowledge of local, state, and global perspectives in business.
- Ability to apply analytical thinking.
- Skills in professional interactions and human relations.

Minor in Computer Information Systems

This minor is not available to students majoring in a Bachelor of Business Administration (BBA) in Management Information Systems. All BBA students pursuing the minor in CIS must apply to the College of Business and Public Policy (CBPP) for upper-division standing prior to taking any upper-division course in the CIS minor. Students pursuing a baccalaureate degree outside CBPP with a minor in CIS can establish approval for upper-division courses by going to the CBPP Student Advising Center (sac@alaska.edu or (907) 786-4100 ([http://catalog.uaa.alaska.edu/undergraduateprograms/cbpp/computerinformationsystems/minor-computerinformationsystems/tel:\(907\)%20786-4100](http://catalog.uaa.alaska.edu/undergraduateprograms/cbpp/computerinformationsystems/minor-computerinformationsystems/tel:(907)%20786-4100))).

Students who wish to minor in Computer Information Systems (CIS) must complete requirements in one of the following three tracks.

Business Analytics Track

Code	Title	Credits
CIS A110	Computer Concepts in Business	3
CIS A210	Contemporary Business Applications Development	3
CIS A330	Database Management Systems	3
CIS A470	Data Warehouses and Business Intelligence	3
BA A375	Statistics for Business and Economics	3
or ECON A312	Econometrics for Business and Economics	
Complete one upper-division course from the following:		3
ACCT A316	Accounting Information Systems II	

BA A452	Financial Derivatives	
BA A480	Marketing Media Analytics	
CIS A310	Analysis of Business Systems	
CIS A361	Advanced Contemporary Business Applications Development	
ECON A329	Economic and Business Forecasting	
Total Credits		18

Cybersecurity Track

Code	Title	Credits
CIS A110	Computer Concepts in Business	3
CIS A210	Contemporary Business Applications Development	3
CIS A330	Database Management Systems	3
CIS A345	Managing Data Communications and Computer Networks	3
Complete two adviser-approved CIS electives related to Cybersecurity		6
Total Credits		18

General Track

Code	Title	Credits
CIS A110	Computer Concepts in Business	3
CIS A210	Contemporary Business Applications Development	3
CIS A310	Analysis of Business Systems	3
CIS A330	Database Management Systems	3
Complete two upper-division courses from the following:		6
CIS A345	Managing Data Communications and Computer Networks	
CIS A350	Advanced Web Page Development for Business Applications	
CIS A361	Advanced Contemporary Business Applications Development	
CIS A390	Selected Topics in Management Information Systems	
CIS A395	Programmer/Analyst Internship	
CIS A445	Advanced Network Management	
CIS A470	Data Warehouses and Business Intelligence	
CIS A490	Advanced Topics in Management Information Systems	
CIS A495	Systems Analyst/User Support Internship	
CIS A498	Individual Research Project	
ECON A312	Econometrics for Business and Economics	

ECON A329 Economic and Business
Forecasting

Total Credits 18

A total of 18 credits is required for the minor, 12 of which must be upper-division.

Management and Marketing

Edward & Cathryn Rasmuson Hall (RH), Room 203, (907) 786-4100
business.uaa.alaska.edu/departments/management-marketing/
(<https://business.uaa.alaska.edu/departments/management-marketing/>)

The Department of Management and Marketing offers a range of academic degrees and certificates through UAA's Anchorage, Kenai, Kodiak and Mat-Su campuses. Bachelor of Business Administration (BBA) degrees in Management (with the option of a Property Management and Real Estate concentration) and in Marketing, along with minors in Business Administration, Alaska Native Business Management, Entrepreneurship, International Business, and Real Estate are offered at the Anchorage campus. An Associate of Applied Science (AAS) in Logistics and Supply Chain Operations is also offered at the Anchorage campus. An AAS in Small Business Administration is offered at the Anchorage and Mat-Su campuses; and an AAS in General Business is offered at the Kenai, Kodiak, and Mat-Su campuses. Certificates are offered in Logistics and Supply Chain Operations at the Anchorage campus. These professional programs prepare students to meet the challenges of a dynamic and changing business environment. Graduates find job opportunities in Alaska, throughout the United States, and internationally.

The BBA in Management prepares students for entry-level management positions in corporations, non-profit organizations, and government; personnel and benefits management; recruitment and career planning services; conflict resolution and arbitration; and management consulting to small businesses. Students gain knowledge in concepts of organizational theory, design and development in a global context; study of human behaviors and interactions within an organization; the management of human resources of an organization; negotiation, conflict resolution and arbitration; strategy formulation for managing the total organization in an ever-changing environment; and the value of ethics and social responsibility. Furthermore, the degree prepares students for graduate studies in management.

Students also have the ability to complete a concentration in Property Management and Real Estate. The Weidner Property Management and Real Estate Program is one of only a handful of programs in the nation that offers a four-year degree with dedicated curriculum focused on the management of real estate assets. This concentrated coursework, in combination with CBPP's core business curriculum, ensures that graduates are prepared to enter a competitive and innovative marketplace with the tools necessary to succeed.

The BBA in Marketing is uniquely designed to provide students with knowledge of the key concepts, processes and tools essential for success in today's digital driven world. Students have opportunities to apply theory and concepts to current marketplace problems and solutions.

The AAS in Logistics and Supply Chain Operations is designed to meet the current and future needs of the Alaska industry, with a workforce that understands the practices and principles of logistics and supply chain operations. Due to its vast size and geography, Alaska poses greater internal logistics and supply chain operational challenges. This program has been designed with input from the industry and is an ideal foundation for students who wish to work in the operations side of this exciting and continuously expanding industry.

The AAS degrees in General Business and Small Business Administration provide students with a general knowledge of entrepreneurship, human resource management, business law concepts, marketing, and financial statement analysis. Students will gain a better understanding of for-profit and not-for-profit businesses, issues of social responsibility, business ethics, and forms of business ownership.

The Alaska Native Business Management minor prepares students for a unique segment of business in Alaska. This minor is for Alaska Native and non-Native students alike who plan to live and work in Alaska. Alaska Native corporations are an economic force in the state of Alaska and there is a need for business professionals educated in the culture and management practices of these organizations.

The minor in Entrepreneurship is designed to provide students with a sequence of courses that delineates and examines the critical concerns and necessary steps that the entrepreneurs must address as they proceed from an idea and innovation to the start-up venture, focusing on funding, planning and growth.

The International Business minor provides students knowledge, skills and experiences that prepare them for careers that include international responsibilities. The program includes course options in international economics, finance, logistics, management and marketing, and offers field studies in international business and geography as well as study-abroad programs.

The Real Estate minor offers a collection of courses that introduce students to the many facets of real estate - for both their professional and personal use. Topics include real estate management, lease agreements, real estate finance and property law. Students can also earn state certification with the successful completion of BA A306, meeting the pre-licensing education requirements for an Alaska Real Estate Salesperson License.

Programs of Study

Occupational Endorsement Certificate

- OEC in Logistics and Supply Chain Operations

Undergraduate Certificate

- Certificate in Logistics and Supply Chain Operations (p. 178)
- Certificate in Retail Management (p. 179)

Associate of Applied Science

- AAS in General Business (p. 179)
- AAS in Logistics and Supply Chain Operations (p. 180)
- AAS in Small Business Administration (p. 181)

Bachelor of Business Administration

- BBA in Management (p. 182)
- BBA in Marketing (p. 183)

Minor

- Minor in Alaska Native Business Management (p. 183)
- Minor in Business Administration (p. 184)
- Minor in Entrepreneurship (p. 183)
- Minor in International Business (p. 184)
- Minor in Real Estate (p. 185)

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Occupational Endorsement Certificate in Logistics and Supply Chain Operations

The Occupational Endorsement Certificate in Logistics and Supply Chain Operations is designed to provide a comprehensive foundation for students who want to initiate or develop a career path in logistics and supply chain operations without having to commit to lengthier educational programs. All credits earned toward the occupational endorsement certificate are transferable to both the Undergraduate Certificate in Logistics and Supply Chain Operations (p. 178) and the Associate of Applied Science in Logistics and Supply Chain Operations (p. 180).

Admission Requirements

Satisfy the Application and Admission Requirements for Occupational Endorsement Certificate Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Occupational Endorsement Certificates (p. 82).
- Complete the Program Requirements below with a grade of C or better in all courses required for the certificate.

Program Requirements

Code	Title	Credits
LGOP A110	Logistics, Information Systems and Customer Service	3
LGOP A120	Warehouse and Inventory Control Operations	3
LGOP A125	Transportation Services	3
LGOP A160	Purchasing and Supply Management	3
LGOP A235	Transport Operations Management	3
Total Credits		15

A total of 15 credits is required for this certificate.

Program Student Learning Outcomes

Students graduating with an Occupational Endorsement Certificate in Logistics and Supply Chain Operations will be able to:

- Demonstrate knowledge of logistics and supply chain operations in today's business environment.
- Perform inventory control analyses used to improve supply chain efficiency.
- Demonstrate the impact of logistics and supply chain operations on an organization's bottom line.
- Demonstrate skills in data mining in supply chain topics and sources.
- Explain the role of transportation in Alaska's economy.
- Demonstrate the ability to communicate effectively.

Undergraduate Certificate in Logistics and Supply Chain Operations

The Undergraduate Certificate in Logistics and Supply Chain Operations program enables students to enhance and develop their understanding and skills in the fields of logistics and supply chain operations. It is designed to provide continuing education opportunities to professionals in the business community.

Admission Requirements

Satisfy the Application and Admission Requirements for Undergraduate Certificate Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Undergraduate Certificates (p. 82).

- Complete the Program Requirements below.
- Students must achieve a grade of C or better in all courses required for the certificate.

Program Requirements

Code	Title	Credits
BA A151	Business Foundations	3
BA A231	Fundamentals of Supervision	3
CIS A105	Introduction to Personal Computers and Application Software	3
or CIS A110	Computer Concepts in Business	
LGOP A110	Logistics, Information Systems and Customer Service	3
LGOP A120	Warehouse and Inventory Control Operations	3
LGOP A125	Transportation Services	3
LGOP A160	Purchasing and Supply Management	3
LGOP A235	Transport Operations Management	3
Two electives at the 100 level or higher. *		6
Total Credits		30

* If students intend to pursue the AAS in Logistics and Supply Chain Operations (p. 180), it is recommended they use these elective credits to prepare for the written communications and math courses required for that degree.

A total of 30 credits is required for this certificate.

Program Student Learning Outcomes

Students graduating with an Undergraduate Certificate in Logistics and Supply Chain Operations will be able to:

- Demonstrate knowledge of logistics and supply chain operations in today's business environment.
- Perform inventory control analyses used to improve supply chain efficiency.
- Demonstrate the impact of logistics and supply chain operations on an organization's bottom line.
- Demonstrate skills in data mining in supply chain topics and sources.
- Explain the role of transportation in Alaska's economy.
- Demonstrate the ability to communicate effectively.

Undergraduate Certificate in Retail Management

Admission to this program is currently suspended. Contact the College of Business and Public Policy for more information.

Associate of Applied Science in General Business

This program is delivered only through Kenai Peninsula College, Kodiak College and Matanuska-Susitna College.

This two-year degree program provides a solid business foundation and preparation for career advancement. Graduates will be able to practice relevant business skills; meet the diverse needs of a business to achieve organizational goals; start and manage their own small business; communicate effectively; and manage their business affairs with professionalism, integrity and a spirit of inquiry.

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83) (15 credits). Of the courses needed to satisfy the General Course Requirements, one must be MATH A105 or higher.
- Complete the program requirements below.

General Course Requirements

Code	Title	Credits
Oral Communications		3
COMM A111	Fundamentals of Oral Communication	
or COMM A235	Small Group Communication	
or COMM A237	Interpersonal Communication	
or COMM A241	Public Speaking	
Written Communication Courses		6
WRTG A111	Writing Across Contexts	
And one of the following:		
CIOA A260A	Business Communications	
WRTG A211	Writing and the Humanities	
WRTG A212	Writing and the Professions	
WRTG A213	Writing and the Sciences	
Humanities, Mathematics and Natural Sciences, and Social Sciences *		6
MATH A105	Intermediate Algebra (or higher)	
And one approved General Course Requirements		
Total Credits		15

* Any ENGL course used to satisfy the humanities General Course Requirement must be different from the written communications requirement and have a course number higher than WRTG A111.

Program Requirements

Code	Title	Credits
ACCT A201	Principles of Financial Accounting **	3
ACCT A202	Principles of Managerial Accounting	3
BA A151	Business Foundations	3
BA A231	Fundamentals of Supervision	3
BA/JUST A241	Business Law I	3
BA A260	Marketing Practices	3
CIS A110	Computer Concepts in Business	3
ECON A201	Principles of Macroeconomics	3
ECON A202	Principles of Microeconomics	3
LGOP A110	Logistics, Information Systems and Customer Service	3
Program Elective Courses		6
Advisor-approved courses from the following programs: ACCT, BA, CIS, CS, ECON		
Electives		9
Total Credits		45

** The ACCT A101 and ACCT A102 sequence may be used to satisfy the ACCT A201 requirement for this degree.

A total of 60 credits is required for the degree.

Program Student Learning Outcomes

Students graduating with an Associate of Applied Science in General Business will be able to:

- Use critical thinking skills to solve problems and make decisions based on accepted business principles.
- Understand the interrelationship of international and domestic business, societies and governments.
- Execute the four functions of management: planning, organizing, leading, controlling.
- Apply effective communication skills in business settings.

Associate of Applied Science in Logistics and Supply Chain Operations

The Associate of Applied Science (AAS) in Logistics and Supply Chain Operations was developed with input from Alaska business, industry and military representatives to meet the needs in all aspects of the operational and technical career fields of logistics. Students will build a foundation of knowledge and skills for successful logistics and supply chain operations: information management and customer service, warehousing and inventory control, purchasing and supply chain operations, transportation services, transportation rates, tariffs, and carrier liability. The AAS is designed to prepare graduates for employment in all the operational and technical aspects of logistics and supply chain operations, careers and fields. Students planning to go on

to a four-year program in the College of Business and Public Policy should know that all ACCT, BA, CIS, ECON, LGOP and LOG courses in those four-year programs must be completed with a grade of C or better.

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83) (15 credits). To provide maximum transferability, it is recommended that students consider the baccalaureate General Education Requirements (p. 86) and Bachelor of Business Administration core requirements (p. 167) when selecting courses to fulfill the Associate of Applied Science General Course Requirements.
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
BA A151	Business Foundations	3
BA A231	Fundamentals of Supervision	3
BA/JUST A241	Business Law I	3
CIS A110	Computer Concepts in Business	3
ECON A201	Principles of Macroeconomics	3
LGOP A110	Logistics, Information Systems and Customer Service	3
LGOP A120	Warehouse and Inventory Control Operations	3
LGOP A160	Purchasing and Supply Management	3
LGOP A125	Transportation Services	3
LGOP A235	Transport Operations Management	3
MATH A121	College Algebra for Managerial and Social Sciences	3-4
or MATH A151	College Algebra for Calculus	
Complete four of the following:		12
BA A273	Introduction to Statistics for Business and Economics	
BA A295	Internship in Business Administration	
BA A375	Statistics for Business and Economics	
BA A377	Operations Management	
ECON A312	Econometrics for Business and Economics	
ECON A329	Economic and Business Forecasting	

Any 300- or 400-level LOG course

OSH A101	Introduction to Occupational Safety and Health
OSH A108	Injury Prevention and Risk Management
OSH A250	Hazardous Materials Operations
TECH A295	Technical Internship
TECH A302	Organizational Safety and Health

Complete 6 credits selected from Humanities, Mathematics and Natural Sciences, or Social Sciences from the AAS General Course Requirement list, other than BA A151, ECON A201, and MATH A121 or MATH A151.

A total of 60-61 credits is required for the degree.

Program Student Learning Outcomes

Students graduating with an Associate of Applied Science in Logistics and Supply Chain Operations will be able to:

- Demonstrate knowledge of logistics and supply chain operations in today's business environment.
- Perform inventory control analyses used to improve supply chain efficiency.
- Demonstrate the impact of logistics and supply chain operations on an organization's bottom line.
- Demonstrate skills in data mining in supply chain topics and sources.
- Explain the role of transportation in Alaska's economy.
- Demonstrate the ability to communicate effectively.

Associate of Applied Science in Small Business Administration

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83) (15 credits). To provide maximum transferability, it is recommended that students consider the baccalaureate General Education Requirements (p. 86) and Bachelor of Business Administration Core Requirements (p. 167) when selecting courses to fulfill the Associate of Applied Science General Course Requirements.
- Complete the program requirements below. Students planning to pursue a BBA must have a grade of C or better in all business courses.

Program Requirements

Code	Title	Credits
Support Courses		
ACCT A101 & ACCT A102	Principles of Financial Accounting I and Principles of Financial Accounting II	3-6
or ACCT A201	Principles of Financial Accounting	
ACCT A202	Principles of Managerial Accounting	3
CIS A110	Computer Concepts in Business	3
MATH A105	Intermediate Algebra *	3-4
or MATH A121	College Algebra for Managerial and Social Sciences	
or MATH A151	College Algebra for Calculus	
Core Courses		
BA A151	Business Foundations	3
BA A166	Entrepreneurship and Small Business Management	3
BA A231	Fundamentals of Supervision	3
BA A233	Survey of Finance	3
BA/JUST A241	Business Law I	3
BA A260	Marketing Practices	3
BA A264	Personal Selling	3
Electives		
Complete 9-12 credits from the following:		9-12
BA A131	Personal Finance	
BA/JUST A242	Business Law II	
BA A273	Introduction to Statistics for Business and Economics	
LGOP A110	Logistics, Information Systems and Customer Service	
LGOP A120	Warehouse and Inventory Control Operations	
LGOP A160	Purchasing and Supply Management	
Or any 300-level ACCT, BA, CIS, ECON, LGOP or LOG course provided the prerequisites have been met. **		

Complete 6 credits from the humanities, mathematics and natural sciences, or social sciences AAS General Course Requirement lists, other than BA A151 and MATH A105, MATH A121 or MATH A151.

* MATH A105 will not satisfy the quantitative skills General Education Requirement for the baccalaureate degree.

** Students who may decide to pursue a BBA can maximize transferability of their credits by taking MATH A121 or MATH A151, BA A273 and any 300-level business course as long as prerequisites have been completed.

A total of 60 credits is required for the degree.

Program Student Learning Outcomes

Students graduating with an Associate of Applied Science in Small Business Administration will be able to:

- Demonstrate an understanding of for profit and not for profit businesses, issues of social responsibility, business ethics, and forms of business ownership.
- Explain the importance of entrepreneurship to the wealth of an economy.
- Demonstrate knowledge of the importance of human resource management, the responsibilities of human resource managers, and the role of human resource planning in an organization's competitive strategy.
- Demonstrate a fundamental knowledge of business law concepts.
- Demonstrate an understanding of financial statement analysis, cash flow analysis, capital assets utilization, budgeting, debt financing, and the preparation of financial statements.
- Demonstrate knowledge of marketing and how the marketing concept applies in both for-profit and nonprofit organizations.
- Demonstrate skills to sell themselves, products, services, and ideas.
- Demonstrate competency in utilizing computer technology.

Bachelor of Business Administration in Management

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the CBPP Bachelor of Business Administration Requirements (p. 167).
- Complete the major requirements below with a grade of C or better.

Major Requirements

Code	Title	Credits
BA A215	Introduction to Property Management	3
BA/JUST A241	Business Law I	3
BA A361	Human Resource Management	3
BA A461	Negotiation and Conflict Management	3
MATH A221	Applied Calculus for Managerial and Social Sciences	3-4
or MATH A251	Calculus I	
Total Credits		15-16

Choose one of the following concentrations: management or property management and real estate.

Code	Title	Credits
Management Concentration		
BA A481	Applications in Management	3
BA A489	From Startup to Growth	3
Upper-division electives in ACCT, BA, CIS, ECON or LOG		12
Total Credits		18

Code	Title	Credits
Property Management and Real Estate Concentration		
BA A225	Leasing in Property Management	3
BA A302	Maintenance in Property Management	3
BA A303	Real Estate Investment Finance	3
BA A306	Real Estate Principles	3
BA A421	Property Management Capstone	3
BA A432	Real Estate Law	3
Complete 6 credits from the following:		6
BA A395	Property Management and Real Estate Internship *	
BA A431	Real Estate Appraisal	
BA A489	From Startup to Growth	
Total Credits		24

* Students with a concentration in property management and real estate may apply 6 credits of BA A395 to meeting degree requirements.

A total of 120 credits is required for the degree, of which a minimum of 45-48 credits must be upper-division.

Licensure and/or Certification

BA A306 is a required course for the Bachelor of Business Administration in Management with a Property Management and Real Estate Concentration, and the course is approved by the Alaska Real Estate Commission as satisfying the pre-licensing education requirement for the Alaska Real Estate Salesperson license. Please visit the State of Alaska Department of Commerce, Community and Economic Development Real Estate Commission's website (<https://www.commerce.alaska.gov/web/cbpl/professionallicensing/realestatecommission>) for the complete list of requirements for licensure.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Student Learning Outcomes

Students graduating with a Bachelor of Business Administration in Management will be able to demonstrate:

- A baccalaureate content knowledge of the Management discipline.
- Knowledge of local, state, and global perspectives in business.
- Ability to apply analytical thinking.
- Skills in professional interactions and human relations.

Bachelor of Business Administration in Marketing

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the CBPP Bachelor of Business Administration Requirements (p. 167).
- Complete the major requirements below with a minimum grade of C.

Major Requirements

Code	Title	Credits
BA/JUST A241	Business Law I	3
BA A375	Statistics for Business and Economics	3
or ECON A312	Econometrics for Business and Economics	
or ECON A329	Economic and Business Forecasting	
BA A381	Consumer Behavior and Relationship Management	3
BA A383	Market Research: Methods, Metrics and Strategies	3
BA A460	Marketing Management	3
BA A463	Branding and Content Marketing Strategies	3
BA A480	Marketing Media Analytics	3
MATH A221	Applied Calculus for Managerial and Social Sciences	3-4
or MATH A251	Calculus I	
Complete an additional 6 credits of upper-division electives in ACCT, BA, CIS, ECON or LOG. Recommended courses include:		6
BA A347	International Marketing	
Total Credits		30-31

A total of 120 credits is required for the degree, of which a minimum of 45 must be upper-division.

Program Student Learning Outcomes

Students graduating with a Bachelor of Business Administration in Marketing will be able to demonstrate:

- A baccalaureate content knowledge of the Marketing discipline.
- Knowledge of local, state, and global perspectives in business.
- Ability to apply analytical thinking.
- Skills in professional interactions and human relations.

Minor in Alaska Native Business Management

Students who wish to minor in Alaska Native business management must complete the following requirements. All courses must be completed with a grade of C or better. Students pursuing a baccalaureate degree outside the College of Business and Public Policy (p. 166) should contact the CBPP Student Advising Center (<http://www.uaa.alaska.edu/cbpp/studentadvisingcenter>).

Code	Title	Credits
AKNS A201	Alaska Native Perspectives	3
BA A201	Introduction to Alaska Native Business	1
BA A202	Alaska Native Organizations	3
BA A401	Alaska Native Corporation Business Management	3
BA A402	Indigenous Leadership	3
Select from the following:		2
BA A290A	Alaska Native Business Practices	
BA A403	Inside the Boardroom of Alaska Native Organizations	
BA A490B	Selected Topics in Alaska Native Corporations	
Upper division Alaska Native Studies (AKNS) or approved courses		3
Total Credits		18

A total of 18 credits is required for this minor.

Minor in Entrepreneurship

Students who wish to minor in Entrepreneurship must complete the following requirements. All courses must be completed with a grade of C or better. A total of 18 credits is required for this minor. At least 6 credits must be 300-level or above.

Code	Title	Credits
Complete the following courses in sequence (12 credits):		
BA A166	Entrepreneurship and Small Business Management	3
BA A286	Entrepreneurship and Innovation	3
BA A386	The Startup Venture	3

BA A489	From Startup to Growth	3
Complete 6 credits from the following (or other courses approved by advisor):		
ACCT A202	Principles of Managerial Accounting	3
BA/JUST A241	Business Law I	3
BA A233	Survey of Finance	3
BA A300	Organizational Theory and Behavior	3
BA A325	Corporate Finance	3
BA A343	Principles of Marketing	3
BA A388	Globalization and Business Environment	3
BA A460	Marketing Management	3
BA A461	Negotiation and Conflict Management	3
BA A480	Marketing Media Analytics	3
CE A438	Design of Civil Engineering Systems	3
CSCE A401	Software Engineering	3
CSCE A470	Computer Science and Engineering Capstone Project	3
EE A438	Design of Electrical Engineering Systems	3
ESM A450	Economic Analysis and Operations	3
GEO A460	Geomatics Capstone Project	3
LOG A378	Foundations of Logistics and Supply Chain Management	3
ME A438	Design of Mechanical Engineering Systems	3

Minor in Business Administration

Students majoring in another subject who wish to minor in business administration must complete the following requirements.* Prerequisites for the following courses must also be satisfied.

Code	Title	Credits
ACCT A201	Principles of Financial Accounting	3
ACCT A202	Principles of Managerial Accounting	3
ECON A201	Principles of Macroeconomics	3
ECON A202	Principles of Microeconomics	3
Upper division Business electives		9
Total Credits		21

* Not available to BBA majors.

A total of 21 credits is required for the minor.

Minor in International Business

Students who wish to minor in international business must complete the following requirements. Prerequisites for these courses must also be satisfied. All courses must be completed with a grade of C or better. Students pursuing a baccalaureate degree outside the College of Business and Public Policy should see the CBPP Student Advising Center for departmental approval.

Code	Title	Credits
Complete the following 9 credits:		9
BA A151	Business Foundations	
BA A287	Introduction to International Business	
BA A388	Globalization and Business Environment	
Complete 3 credits from the following international business courses:		3
BA A347	International Marketing	
BA A427	International Finance	
ECON A363	International Economics	
LOG A416	International Logistics and Transportation Management	
Complete 6 credits from the following electives: *		6
BA A485	International Business Applications	
BA A486	Field Studies in International Business	
BA A490C	Selected Topics in International Business	
GEOG A390A	Topics in Global Geography	
GEOG A490	Field Studies in Geography	
HIST A321	Modern China	
HIST A322	Modern Japan	
INTL/HIST/PS A325	Northeast Asia in 21st Century	
JPC A404	Global Media and Communications Systems	
JPN A350	Business Japanese	
PS A321	International Relations	
SOC A380	Sociology of Globalization	
SPAN A320	Studies in Contemporary Hispanic Cultures	

Students may select up to an additional 6 credits of international business courses as electives.

Total Credits	18

* With approval of the International Business Minor Coordinator, 3 credits in a 300-level or higher business-related course from an approved study abroad program may be qualified to substitute for one of the electives.

A total of 18 credits is required for the minor.

Minor in Real Estate

Students majoring in another subject who wish to minor in real estate must complete the following requirements.* All courses must be completed with a C or better. Students pursuing a baccalaureate degree outside the College of Business and Public Policy should see the departmental advisor.

Code	Title	Credits
BA A215	Introduction to Property Management	3
BA/JUST A241	Business Law I	3
BA A303	Real Estate Investment Finance	3
BA A306	Real Estate Principles	3
BA A432	Real Estate Law	3
ECON A201	Principles of Macroeconomics	3
Total Credits		18

* Not available to BBA Management majors.

A total of 18 credits is required for the minor.

Licensure and/or Certificate

BA A306 is a required course for the Minor in Real Estate, and the course is approved by the Alaska Real Estate Commission as satisfying the pre-licensing education requirement for the Alaska Real Estate Salesperson license. Please visit the State of Alaska Department of Commerce, Community and Economic Development Real Estate Commission's website (<https://www.commerce.alaska.gov/web/cbpl/professionallicensing/realestatecommission>) for the complete list of requirements for licensure.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

School of Education

The University of Alaska Anchorage is in full compliance with the institutional reporting requirements mandated in Title II of the Higher Education Act Amendments of 1998. Please contact the School of Education for a copy of the completed report.

The School of Education in the College of Arts and Sciences comprises a community of educators dedicated to improving the quality of education. The mission of the School of Education is to prepare educators and support the lifelong learning of professionals to embrace diversity and to be intellectually and ethically strong, resilient and passionate in their work with Alaska's learners, families, educators and communities. Programs emphasize the power of learning to transform people's lives. Across the university, faculty members teach professional educators to work in diverse settings, to form and sustain learning partnerships, and to provide learning across the life span. The school is confident that this preparation will result in educators' significant contributions to society.

The School of Education promotes the following core values in their collegial interactions to ensure that program graduates exhibit:

- **Intellectual vitality:** Professional educators examine diverse perspectives, engage in research and scholarship, contribute to knowledge and practice, and apply innovations in technology.
- **Collaborative spirit:** Professional educators generate, welcome and support the collaborative relationships and partnerships that enrich people's lives.
- **Inclusiveness and equity:** Professional educators create and advocate for learning communities that advance knowledge and ensure the development, support and inclusion of people's abilities, values, ideas, languages and expressions.
- **Leadership:** Professional educators are committed to the highest standards of ethical behavior in their roles, using professional expertise to improve the communities in which they live and work, and demonstrating the ability to translate theories and principles into transformative educational practice.

The school believes that learning must be designed, delivered and evaluated within the contexts of these core values and program outcomes.

The School of Education offers undergraduate and graduate curricula and programs designed to prepare personnel for various professional roles related to education in a variety of learning environments. The School of Education is accredited by the Council for Accreditation of Educator Preparation (CAEP). Professional preparation programs are approved by the Alaska Department of Education and Early Development and are based on CAEP standards.

The Alaska Department of Education and Early Development issues certificates and endorsements under the "approved program" process for certification. The University of Alaska Anchorage recommends individuals to the commissioner of Education and Early Development for certification or endorsement after successful completion of one or more of the approved programs. Only the director of the School of Education is authorized to recommend candidates for the appropriate certificate or endorsement.

In each of the school's curricula and programs, students are introduced to fundamental issues of education in the contemporary world through courses designed to develop perspective and understanding of the relationship of education to society. Courses provide theory and practice in the development of instructional materials and an understanding of methods of instruction. Many courses and programs are offered through distance delivery methods. The school offers high-quality distance-delivered coursework in order to improve access for rural students and provide flexible scheduling for practicing educators. Additionally, the school partners with UAA community campuses in optimizing the use of technology for distance delivery through intercampus collaboration.

Individuals who desire a UAA degree or certificate, or Alaska state teacher certification or endorsement, must apply for admission to the University of Alaska Anchorage and to the School of Education in the College of Arts and Sciences. Students are formally admitted to an appropriate program on the basis of multiple criteria, including their ability to make a positive contribution to educational professions.

Candidates who seek Alaska state licensure must successfully complete a School of Education “approved program,” as well as any additional requirements that may be initiated by the Alaska Department of Education and Early Development. Only courses with a grade of C or higher will be applied to meet certification or endorsement requirements. In addition, candidates must demonstrate professional behaviors and dispositions consistent with the School of Education’s Conceptual Framework as well as abide by the UAA Student Code of Conduct and the Code of Ethics and Professional Teaching Standards adopted by the Alaska Professional Teaching Practices Commission. These documents are available on the School of Education website (<http://www.uaa.alaska.edu/academics/school-of-education>). Candidates should be advised that total credits may exceed minimums because of prerequisite requirements, knowledge and skill enhancement, individually selected majors and minors, and areas of specialization and/or emphasis.

The School of Education has three academic departments:

1. The Department of Teaching and Learning with programs in school-age care, early childhood education, elementary education and secondary education. (907) 786-4412
2. The Department of Counseling and Special Education with programs in counselor education, special education, early childhood special education and opportunities in speech and language pathology. (907) 786-4450
3. The Department of Educational Leadership with programs in educational leadership (principal, superintendent and teacher leadership preparation). (907) 786-4450

Undergraduate Program Options

The School of Education offers several program options for candidates interested in working with children.

- Associate of Applied Science in Early Childhood Development
- Bachelor of Arts in Early Childhood Education¹
- Bachelor of Arts in Elementary Education¹
- Post-Baccalaureate Certificate in Elementary Education¹
- Post-Baccalaureate Certificate in Early Childhood Pre-K-Third Grade¹

¹ *Programs fulfill Alaska Department of Education and Early Development teacher certification or endorsement requirements. Refer to Post-Baccalaureate Certificate Programs (p. 97) for more information.*

High School Preparation

All programs in the School of Education build upon the candidates’ strong high school preparation in the following areas:

- English composition and writing
- Oral communication
- World languages
- Algebra
- Computer literacy

- Social sciences
- Natural sciences

Field Placements

All School of Education undergraduate programs require field experiences in school or agency settings. The School of Education works with Alaska school districts to offer diverse placements for students. Diversity of placements refers to grade levels and types of schools. It is our policy to ensure, whenever possible, that students receive diverse placements in schools and grade levels. Students who live in rural district will be placed in the most diverse placements possible in their location

Criminal History Background Clearance

The School of Education requires compliance with specific background clearance policies and procedures for candidates participating in university-sponsored fieldwork. In some cases, criminal history background clearance is required for admission to a department or program. In addition to self disclosure of criminal history to the School of Education and its partners, a check of the Alaska and National Sex Offender Registries, a fingerprint-based check by the Federal Bureau of Investigation, and a name-based check through the Alaska Public Safety Information Network may be required. Various agencies and centers may have additional requirements.

Failure to comply with the School of Education background check requirements will result in denial of access to field placement settings. Failure to pass the criminal history background check will result in removal from the program. More information is available on the School of Education website (<http://www.uaa.alaska.edu/academics/school-of-education>).

Cooperating School/Agency

Practica, internships and other field placements are made only in cooperation with participating school districts and agencies. The school districts and agencies that work in cooperation with the School of Education reserve the right to request additional information and/or preparation from candidates, as determined by their established policies and practices. Cooperating districts and agencies also determine the number of available spaces and placements for candidates. Placements may become competitive if the number of applicants exceeds the number of spaces. Districts and agencies also reserve the right to refuse or terminate placements when candidates do not meet an acceptable standard of performance. Thus, while the university makes every effort to find appropriate field placements for candidates, admittance to a degree/certificate/endorsement program does not guarantee acceptance by cooperating school districts or agencies. Unacceptable academic performance, an unprofessional attitude, unsatisfactory field reports, violation of professional ethics or other factors may result in removal from the field placement.

Transfer

Candidates who have taken all or part of an approved program at another university must take at least 9 credits of approved education

courses at the University of Alaska prior to being admitted to an advanced practicum or internship.

Faculty

Jonathan Bartels, Assistant Professor, jbartels2@alaska.edu
 Ginger Blackmon, Assistant Professor, gblackmon@alaska.edu
 Ellen Brigham, Term Assistant Professor, etbrigham@alaska.edu
 Leah Brown, Term Assistant Professor, lbrown95@alaska.edu
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 Peggy Spencer, Term Assistant Professor, pspencer@alaska.edu
 Peter Snow, Assistant Professor, pmsnow@alaska.edu
 Cassie Wells, Term Assistant Professor, cdwells@alaska.edu
 (cdwells@alaska.edu)

Early Childhood

Professional Studies Building (PSB), Room 225, (907) 786-4412
www.uaa.alaska.edu/academics/school-of-education/ (<http://www.uaa.alaska.edu/academics/school-of-education/>)

The Early Childhood program at UAA blends theory and practice in the preparation of early childhood educators who can deliver quality care and education for young children from birth through age eight.

Within the Early Childhood program are three options:

- Associate of Applied Science in Early Childhood Development
- Bachelor of Arts in Early Childhood Education
- Post-Baccalaureate Certificate in Early Childhood Pre-K-Third Grade.

The Associate of Applied Science in Early Childhood Development program prepare para-educators and other professionals to work in early care and education settings, including the public school system. The Bachelor of Arts in Early Childhood Education prepares professionals

to work with young children from birth through age eight. Successful completion of the Bachelor of Arts in Early Childhood Education (or the Post-Baccalaureate Certificate in Early Childhood Pre-K-Third Grade) requirements leads to an institutional recommendation for initial teacher certification with an endorsement in pre-K-third grade. All programs are developed to meet the National Association for the Education of Young Children guidelines for personnel preparation.

Programs of Study

Undergraduate Certificate

- Certificate in Early Childhood Development (p. 187)

Associate of Applied Science

- AAS in Early Childhood Development (p. 187)

Bachelor of Arts

- BA in Early Childhood Education (p. 188)

Post-Baccalaureate Certificate

- Certificate in Early Childhood: Pre-K-Third Grade (with Teacher Certificate (p. 191))

Undergraduate Certificate in Early Childhood Development

Admission to this program is currently suspended. Contact the School of Education for more information.

Associate of Applied Science in Early Childhood Development

Admission Requirements

- Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).
- Complete an application to the Associate of Applied Science Early Childhood Development program. Applications may be obtained from the School of Education (SOE) Office of Student Services (<https://www.uaa.alaska.edu/academics/college-of-education/student-services/index.cshhtml>), (907) 786-4401 (<http://catalog.uaa.alaska.edu/undergraduateprograms/coe/earlychildhood/aas-earlychildhooddevelopment/tel:19077864401>).

Academic Requirements

All candidates in the Associate of Applied Science Early Childhood Development program must maintain a cumulative GPA of 2.00 or above in all EDEC courses.

Background Check Requirements

See School of Education Field Placements (p. 185).

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).

- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83). WRTG A211, WRTG A212, WRTG A213 or WRTG A214 are recommended for the written communication requirement. MATH A105 or higher is recommended as a mathematics and natural sciences requirement.
- Complete all program requirements below with a minimum grade of C.

Program Requirements

Code	Title	Credits
Select one of the following:		3
DN A145	Child Nutrition	
DN A151	Nutrition Through the Life Cycle	
DN A155	Survey of Alaska Native Nutrition	
Select one of the following:		3
EDSE A212	Human Development and Learning	
PSY A150	Lifespan Development	
PSY A365	Child and Adolescent Development	
EDEC A105	Introduction to the Field of Early Childhood Education	3
EDEC A106	Creativity and the Arts in Early Childhood	3
EDEC A206	Integrated Curriculum for Young Children	3
EDEC A210	Guiding Young Children	3
EDEC A241	Infant and Toddler Development	3
EDEC A242	Family and Community Partnerships	3
EDEC A292	Early Childhood Practicum Seminar	3
EDEC A295	Early Childhood Practicum *	3
EDEC A303	Young Children in Inclusive Settings	3
Complete 12 credits of electives. Students are strongly encouraged to discuss elective choices with an advisor.		12
Total Credits		45

* To be admitted to EDEC A295, applicants must complete an application and have earned a minimum grade of C in all EDEC courses.

A total of 60 credits is required for the degree.

Program Student Learning Outcomes

Student outcomes are based on the Standards for Alaska's Teachers (<http://www.eed.state.ak.us/standards>). Outcomes are also based on the professional preparation standards of the National Association for the Education of Young Children (NAEYC) (<http://www.naeyc.org>). The students will demonstrate the following outcomes:

- Create a healthy, respectful, supportive, and challenging learning environment based on knowledge of child development.

- Create respectful, reciprocal relationships that support and empower families, and involve all families in their children's development and learning.
- Use systematic observations, documentation, and other effective assessment strategies in a responsible way, in partnership with families and other professionals, to positively influence children's development and learning.
- Design effective approaches to teaching and learning, implement and evaluate experiences that promote positive development and learning for all children.
- Incorporate knowledge of content areas to create appropriate experiences for young children.
- Use ethical guidelines and other professional standards related to early childhood practice.
- Demonstrate knowledgeable, reflective, and critical perspectives on professional practice, making informed decisions that integrate knowledge from a variety of sources.

The expected mastery of student outcomes differs in accordance with program level. Students who complete the AAS in Early Childhood will be proficient entry-level child care workers, have knowledge of child development, and demonstrate basic abilities in child care paraprofessional skills.

Bachelor of Arts in Early Childhood Education

An individual interested in undergraduate early childhood preparation may obtain a Bachelor of Arts in Early Childhood Education to work with children from the ages of birth to age 8. Individuals with baccalaureate degrees should refer to the Early Childhood Post Baccalaureate Certificate Program (p. 191) for more information.

The Bachelor of Arts in Early Childhood is a professional degree. Unique features of the program include a foundation in liberal studies with coursework in child development and families. Candidates will engage in field experiences throughout their coursework to directly apply teaching and learning principles. In addition, candidates will engage in an internship in early childhood settings. Admission to the program occurs in two stages and admission to the internship requires academic achievement, written and oral communication skills, and community involvement. For more information see School of Education Field Placements (<https://www.uaa.alaska.edu/academics/school-of-education/student-services/field-experiences.cshtml/#fndtn-panel6-1>).

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Admission to the College of Arts and Sciences School of Education, Department of Teaching and Learning: Early Childhood Education Major

Admission to the Department of Teaching and Learning: Early Childhood Education major is required for most upper-division

coursework in Early Childhood Education. In order to be admitted to the Department of Teaching and Learning: Early Childhood Education major, applicants must:

1. Complete the application to the Department of Teaching and Learning: Early Childhood Education major. Please call an advisor from the School of Education Student Services office at (907) 786-4401 for an advising appointment.
2. Complete Tier 1: Basic College-Level Skills General Education Requirements (p. 90) (transfer credits may be used).
3. Complete a minimum of 9 lower-division credits from the Early Childhood Education major requirements with a minimum grade of C.
4. Have a cumulative GPA of 3.00.
5. Successfully complete the Praxis I: Core Pre-Professional Skills Test. Contact the School of Education Student Services office for current passing scores.
6. Submit a successful background check with the Alaska Background Check System (ABCS). Please visit School of Education Field Experience website (<https://www.uaa.alaska.edu/academics/college-of-education/student-services/field-experiences.cshtml>) for detailed information.

Admission to the University as an Early Childhood Education major does not guarantee admission to the Department of Teaching and Learning: Early Childhood Education program.

Admission to Early Childhood Education Advanced Practicum

1. Meet all the requirements for and be admitted to the Department of Teaching and Learning: Early Childhood Education major.
2. Submit an application form for admission to Advanced Practicum. Contact the School of Education Student Services office for fall and spring application deadlines at (907) 786-4401.
3. Apply for Student Teaching Authorization Certificate. This application includes fingerprinting and a criminal background check. Fee required. Contact School of Education Student Services Office for more information.

Admission to Early Childhood Education Internship (Student Teaching Experience)

1. Submit an application form for admission to Early Childhood Education Internship. Contact the School of Education Student Services office for fall and spring application deadlines at (907) 786-4401.
2. Interview upon request.
3. Demonstrate general content knowledge with a passing score on Praxis II: Elementary Education: Content Knowledge (5018) or Praxis II: Curriculum, Instruction, and Assessment (5017). *Note: when taking the exam, please check UAA as a receiving institution.*
4. A current Student Teaching Authorization Certificate is required for admission to internship (finger printing and criminal background check process).

5. Complete school district specific application for internship placement. See School of Education Student Services Office for more information.

Notes: Admission to the Department of Teaching and Learning: Early Childhood Education major does not guarantee admission to the internship. Partnership organizations, early care and education centers and other school settings have the right to refuse or limit field experience placements for university students.

Additional Information

- All Early Childhood Education courses must be completed with a minimum grade of C. Upon successful completion of the Early Childhood Education licensure program, a teacher candidate will obtain an Institutional Recommendation from the School of Education to the State of Alaska for teacher certification.
- Internship is a full-time placement (not credit hours) in a public-school setting. Interns are expected to be present in schools the same hours as school district teachers. Internship is only offered during fall and spring semesters. Reference Internship Handbook for more detailed information.
- 10-30 hours of field experience are required for most Early Childhood major courses.
- Internship(s) must be completed successfully and all early childhood major requirements, the Alaska studies requirement, MATH A211, MATH A212, and foundation requirements in child development and social relationships and inclusive environments must be completed with a minimum grade of C in order to obtain an institutional recommendation for teacher certification.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86). Some of the foundation and major requirements may be used to satisfy General Education Requirements.
- Complete the background check requirements listed under Field Placements (p. 185).
- Complete the foundation requirements below.
- Complete the major requirements below.

Foundation Requirements

Complete the following foundation courses. The courses are selected to provide future early childhood educators with the skills and background knowledge in the various subjects they will be expected to teach. The selection is based on national and state standards for content preparation. Some of the foundation courses may also be used to meet General Education Requirements.

Code	Title	Credits
Social Sciences GER:		6
SWK A243	Cultural Diversity and Community Service Learning	
or LSSS A111	Cultural Foundations of Human Behavior	

In addition, select one of the following:

ANTH A250	The Rise of Civilization	
GEOG/INTL A101	Local Places/Global Regions: An Introduction to Geography	
HNRS A292	Honors Seminar in Social Science	
PS A101	Introduction to American Government	
PS A102	Introduction to Political Science	
Nutrition (select one of the following):		3
DN A145	Child Nutrition	
DN A151	Nutrition Through the Life Cycle	
DN A155	Survey of Alaska Native Nutrition	
Humanities GER (select one of the following):		3
HIST A131	History of the United States I	
HIST A132	History of the United States II	
HIST A355	Major Themes in US History	
Child Development (select one of the following):		3
EDSE A212	Human Development and Learning	
PSY A150	Lifespan Development	
PSY A365	Child and Adolescent Development	
Quantitative Skills GER (select one of the following):		3
MATH A121	College Algebra for Managerial and Social Sciences	
MATH A151	College Algebra for Calculus	
STAT A200	Elementary Statistics	
Social Relationships and Inclusive Environments (select two of the following):		5-6
CEL A292	Introduction to Civic Engagement	
EDSE A311Y	Special Children from Birth through Five	
EDEL A327	Teaching Social Studies in Elementary Schools	
EDSE A482	Inclusive Classrooms for All Children	
EDSL A201	Foundations of Communication Disorders	
SWK A342	Human Behavior in the Social Environment	
SWK A409	Introduction to Child Welfare	
SWK A410	Trauma in Childhood	
Alaska Studies (select one of the following):		3
ANTH A200	Alaska Native Cultures	
EDFN A478	Issues in Alaska Native Education, K-12	
EDL A493	Implementing Alaska Native Values into the Classroom or Work Place	
HIST A341	History of Alaska	
Quantitative Reasoning:		6

MATH A211	Mathematics for Elementary School Teachers I	
MATH A212	Mathematics for Elementary School Teachers II	
Total Credits		32-33

Major Requirements

Field experience in early childhood programs may be required as part of core courses.

Code	Title	Credits
Core Courses		
EDEC A105	Introduction to the Field of Early Childhood Education	3
EDEC A106	Creativity and the Arts in Early Childhood	3
EDEC A206	Integrated Curriculum for Young Children	3
EDEC A210	Guiding Young Children	3
EDEC A242	Family and Community Partnerships	3
EDEC A303	Young Children in Inclusive Settings	3
EDEC A408	Children's Literature: Early Childhood Years	3
EDFN A300	Philosophical and Social Context of American Education	3
or EDFN A304	Comparative Education	
EDFN A301	Foundations of Literacy and Language Development	3
EDFN A302	Foundations of Educational Technology	3
PEP A345	Incorporating Health and Physical Activity into the Pre-K - 6 Classroom	2
Select two of the following courses:		6
EDEC A241	Infant and Toddler Development	
EDEC A310	A Developmental Approach to Assessment in Early Childhood Education	
EDEC A407	Action Research Using Observation and Documentation	
Methodology Requirements		
EDEC A403	Mathematics and Science in Early Childhood	3
EDEC A404	Literacy for Young Children	3
Internship and Seminar Requirements		
EDEC A492E	Early Childhood Advanced Practicum Seminar	1
EDEC A492I	Early Childhood Internship Seminar	1

EDEC A495E	Early Childhood Advanced Practicum	3
EDEC A495I	Early Childhood Internship	9
Electives		12
Total Credits		70

A minimum of 120 credits is required for the degree, of which 42 must be upper-division.

Institutional Recommendation Pre-K-3 Teacher Certification

Candidates who complete an internship (Student Teaching Experience) in the primary grades (pre-K-3rd grade) may apply for teacher certification, pre-K-3rd grade. Following are the requirements for an institutional recommendation for teacher certification, pre-K-3rd grade from the Alaska Department of Education:

1. Major Requirements completed with a minimum grade of C.
2. Alaska studies requirement, MATH A211, MATH A212, and foundation requirements in child development and social relationships and inclusive environments completed with a minimum grade of C.
3. Cumulative GPA of 2.75.
4. Cumulative GPA of 3.00 in all major requirements.
5. Passing scores on the Praxis I Core Pre-Professional Skills Test and Praxis II (5017 or 5018) exams.
6. Internships (Student Teaching Experience) satisfactorily completed.
7. Bachelor of Arts in Early Childhood Education degree conferred.

Program Student Learning Outcomes

Student outcomes for the four early childhood programs are based on the Standards for Alaska's Teachers located at www.eed.state.ak.us/standards (<http://www.eed.state.ak.us/standards>). Outcomes are also based on the professional preparation standards of the National Association for the Education of Young Children (NAEYC) found at www.naeyc.org (<http://www.naeyc.org>). Students will demonstrate the following outcomes:

- Create a healthy, respectful, supportive and challenging learning environment based on knowledge of child development.
- Create respectful, reciprocal relationships that support and empower families, and involve all families in their children's development and learning.
- Use systematic observations, documentation and other effective assessment strategies in a responsible way, in partnership with families and other professionals, to positively influence children's development and learning.
- Design effective approaches to teaching and learning, implement and evaluate experiences that promote positive development and learning for all children.
- Incorporate knowledge of content areas to create appropriate experiences for young children.
- Use ethical guidelines and other professional standards related to early childhood practice.

- Demonstrate knowledgeable, reflective and critical perspectives on professional practice, making informed decisions that integrate knowledge from a variety of sources.

The expected mastery of student outcomes differs in accordance with program level. Students who complete the Bachelor of Arts in Early Childhood Education will demonstrate advanced integrated knowledge and skills in preparation for careers in teaching primary grades (K-3) as well as in infant, toddler and preschool educational programs.

Post-Baccalaureate Certificate in Early Childhood Pre-K-Third Grade (with Teacher Certification)

Those students who already have a baccalaureate degree may obtain an Early Childhood Pre-K-Third Grade Post-Baccalaureate Certificate by completing the following requirements.

Admission Requirements

Admission to the University of Alaska Anchorage

Satisfy the Admission Requirements for Post-Baccalaureate Certificate Programs (p. 52). Complete the UAA Undergraduate Application for Admission, available on the UAA Admissions website (<http://www.uaa.alaska.edu/admissions>).

Admission to the School of Education Department of Teaching and Learning: Early Childhood Education Pre-K-Third Grade Post- Baccalaureate Certificate program

In order to be admitted to the School of Education as an Early Childhood Education Pre-K-Third Grade Post-Baccalaureate Certificate candidate, applicants must meet the following requirements.

1. Complete an application for admission to the Department of Teaching and Learning: Early Childhood Education Pre-K-3rd Grade Post-Baccalaureate Certificate, for fall or spring admission. Please be aware that the admission deadlines for UAA may vary from those of the Department of Teaching and Learning. For financial aid purposes, applicants must adhere to the deadlines established for the UAA Undergraduate Application for Admission. Contact SOE Student Services office for applications at (907) 786-4401.
2. Have a cumulative grade point average of 3.00 for the baccalaureate degree.
3. Successfully complete the Praxis I: Core Pre-Professional Academic Skills Test or other Alaska Early Education and Development (<http://www.eed.state.ak.us/TeacherCertification>) (EED) approved basic competency exam requirement. Contact the School of Education for current passing scores.
4. Submit a successful background check with the Alaska Background Check System (ABCS). Please visit School of Education Field Experiences website (<https://www.uaa.alaska.edu/academics/college-of-education/student-services/field-experiences.cshml>) for detailed information.

Admission to the Department of Teaching and Learning: Early Childhood Education Pre-K-third grade certificate program does not guarantee admission to the internship (student teaching experience).

Admission to Early Childhood Advanced Practicum (for Certification Routes I and II)

1. Meet all the requirements for and be admitted to the Department of Teaching and Learning: Early Childhood Education Pre-K-3rd Grade certification program.
2. Submit an application form for admission to Advanced Practicum. Contact the School of Education Student Services office for fall and spring application deadlines at (907) 786-4401.
3. Apply for Student Teaching Authorization Certificate. This application includes fingerprinting and a criminal background check. Fee required. Contact SOE Student Services Office for more information.

Admission to the Early Childhood Internship (Student Teaching Experiences) (for all Certification Routes)

1. Submit an application form for admission to the Early Childhood Education internship. Contact the School of Education for appropriate fall and spring deadlines at (907) 786-4401.
2. Interview upon request.
3. Demonstrate content knowledge with a passing score on Praxis II: Elementary Education: Content Knowledge (5018) or Praxis II: Curriculum, Instruction, and Assessment (5017). Note: when taking the exam, please check UAA as receiving institution.
4. A current Student Teaching Authorization Certificate is required for admission to the internship (finger printing and criminal background check process).
5. Complete school district specific application for internship placement. See SOE Student Services for more information.

Note: Admission to the Department of Teaching and Learning Early Childhood program does not guarantee admission to the internship.

Academic Requirements

All Early Childhood Education Pre-K-Third Grade Post-Baccalaureate Certificate courses must be completed with a grade of C or higher in order to obtain an institutional recommendation for teacher certification.

Graduation Requirements

- Complete the General University Requirements for Post-Baccalaureate Certificates (p. 97).
- Complete the Background Check Requirements as outlined in Field Placements (p. 185) located in the overview the School of Education.
- Complete the program requirements below.

Program Requirements

There are three concentrations within the program leading to an Early Childhood Education Pre-K-Third Grade Post-Baccalaureate Certificate.

1. Certification route I: This concentration is for applicants who have a baccalaureate degree and are seeking their initial teacher certificate. The certificate requires foundations coursework, early childhood education major coursework, methodology coursework and an internship.
2. Certification route II: This concentration is for applicants who have a baccalaureate degree and an associate degree in early childhood development or a baccalaureate in early childhood education (non-licensure program).
3. Certification route III: This concentration is for applicants seeking an early childhood education Pre-K-Third Grade endorsement on an existing teacher certificate.

Alaska Certification Note

If the candidate is seeking certification in the State of Alaska, the candidate must complete a state-approved Alaska studies course (3 credits) and Alaska multicultural course (3 credits) in addition to the required courses outlined for each certification route (if not already certified in the State of Alaska). For more details see the EED website (<http://www.eed.state.ak.us>).

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Certification Route I

Code	Title	Credits
Foundation Area Coursework		
Select one of the following courses:		3
EDFN A300	Philosophical and Social Context of American Education	
or EDFN A304	Comparative Education	
EDFN A301	Foundations of Literacy and Language Development	
Select one of the following:		3
EDSE A212	Human Development and Learning	
PSY A365	Child and Adolescent Development	
Early Childhood Major Coursework		
EDEC A242	Family and Community Partnerships	3
EDEC A303	Young Children in Inclusive Settings	3
Select one of the following:		3
EDEC A206	Integrated Curriculum for Young Children	
EDEC A210	Guiding Young Children	

EDEC A408	Children's Literature: Early Childhood Years	
or EDEC A608	Analysis of Children's Literature: Early Childhood Years	
Select one of the following:		3
EDEC A310	A Developmental Approach to Assessment in Early Childhood Education	
EDEC A407	Action Research Using Observation and Documentation	
or EDEC A607	Observation and Documentation: Inquiry in Action	
Methodology Requirements		
EDEC A403	Mathematics and Science in Early Childhood	3
EDEC A404	Literacy for Young Children	3
Practicum, Internship and Seminar Requirements		
EDEC A492E	Early Childhood Advanced Practicum Seminar	1
EDEC A495E	Early Childhood Advanced Practicum	3
EDEC A492I	Early Childhood Internship Seminar	1
EDEC A495I	Early Childhood Internship	9
Total Credits		38

Satisfaction of all major requirements, totaling a minimum of 38 credits, must be demonstrated through coursework completed either before or after the award of the student's first baccalaureate degree. However a minimum of 24 approved credits, including EDEC A495I, must be completed after the award of the baccalaureate degree.

Certification Route II

Code	Title	Credits
Childhood Major Coursework		
Select one of the following:		3
EDEC A303	Young Children in Inclusive Settings	
EDEC A408	Children's Literature: Early Childhood Years	
or EDEC A608	Analysis of Children's Literature: Early Childhood Years	
Select one of the following:		3
EDEC A310	A Developmental Approach to Assessment in Early Childhood Education	
EDEC A407	Action Research Using Observation and Documentation	
or EDEC A607	Observation and Documentation: Inquiry in Action	
Methodology Requirements		

EDEC A403	Mathematics and Science in Early Childhood	3
EDEC A404	Literacy for Young Children	3
Advanced Practicum, Internship and Seminar Requirements		
EDEC A492E	Early Childhood Advanced Practicum Seminar	1
EDEC A495E	Early Childhood Advanced Practicum	3
EDEC A492I	Early Childhood Internship Seminar	1
EDEC A495I	Early Childhood Internship	9
Total Credits		26

Satisfaction of all major requirements, totaling a minimum of 26 credits, must be demonstrated through coursework completed either before or after the award of the student's first baccalaureate degree. However a minimum of 24 approved credits, including EDEC A495I must be completed after the award of the baccalaureate degree.

Certification Route III:

Code	Title	Credits
Foundation Area Coursework		
Inclusive Practices (select one of the following):		3
EDEC A303	Young Children in Inclusive Settings	
EDSE A311Y	Special Children from Birth through Five	
EDSE A482	Inclusive Classrooms for All Children	
Early Childhood Major Coursework		
Select two of the following:		6
EDEC A210	Guiding Young Children	
EDEC A242	Family and Community Partnerships	
EDEC A408	Children's Literature: Early Childhood Years	
or EDEC A608	Analysis of Children's Literature: Early Childhood Years	
Select one of the following:		3
EDEC A310	A Developmental Approach to Assessment in Early Childhood Education	
EDEC A407	Action Research Using Observation and Documentation	
or EDEC A607	Observation and Documentation: Inquiry in Action	
Internship and Seminar Requirements		
EDEC A492I	Early Childhood Internship Seminar	1

EDEC A495I	Early Childhood Internship	9
Total Credits		22

Satisfaction of all major requirements, totaling a minimum of 22 credits, must be demonstrated through coursework completed either before or after the award of the student's first baccalaureate degree. However a minimum of 16 approved credits, including EDEC A495I must be completed after the award of the baccalaureate degree.

Institutional Recommendation — Pre-K-Third Grade Teacher Certification

Following are the requirements for an institutional recommendation.

1. All course requirements completed with a grade of C or higher.
2. Cumulative GPA of 3.00 in the Pre-K-Third Grade Post-Baccalaureate Certificate courses.
3. Passing scores on the Praxis I and II examinations or other EED approved highly qualified exam requirement (<http://www.eed.state.ak.us/TeacherCertification>).
4. Satisfactorily completion of internships.

Program Descriptions and Student Learning Outcomes

The Post-Baccalaureate Certificate in Early Childhood Pre-K-Third Grade prepares professionals who already have baccalaureate degrees to work with young children from birth through eight years in preschool/primary school settings. Successful completion of program requirements leads to an institutional recommendation for initial teacher certification with an endorsement in pre-K-third grade. Courses at the 400-level and above applied to the certificate may also be applied to MEd programs with advisor approval.

Students who complete the post-baccalaureate certificate will demonstrate advanced integrated knowledge and skills in preparation for careers in teaching primary grades (K-3) as well as in infant, toddler, and preschool educational programs.

Student outcomes for the program are based on the Standards for Alaska's Teachers located at www.eed.state.ak.us/standards (<http://www.eed.state.ak.us/standards>). Outcomes are also based on the professional preparation standards of the National Association for the Education of Young Children (NAEYC) found at www.naeyc.org (<http://www.naeyc.org>). Candidates from the post-baccalaureate will be able to:

1. Create a healthy, respectful, supportive, and challenging learning environment based on knowledge of child development.
2. Create respectful, reciprocal relationships that support and empower families, and involve all families in their children's development and learning.
3. Use systematic observations, documentation, and other effective assessment strategies in a responsible way, in partnership with families and other professionals, to positively influence children's development and learning.

4. Design effective approaches to teaching and learning, implement and evaluate experiences that promote positive development and learning for all children.
5. Incorporate knowledge of content areas to create appropriate experiences for young children.
6. Use ethical guidelines and other professional standards related to early childhood practice.
7. Demonstrate knowledgeable, reflective, and critical perspectives on professional practice, making informed decisions that integrate knowledge from a variety of sources.

Elementary Education

Professional Studies Building (PSB), Room 224, (907) 786-4412
www.uaa.alaska.edu/academics/school-of-education (<https://www.uaa.alaska.edu/academics/school-of-education>)

Individuals interested in undergraduate elementary teacher preparation may obtain either a BA in Elementary Education or a Post-Baccalaureate Certificate in Elementary Education with elementary teacher certification.

Programs of Study

Bachelor of Arts

- BA in Elementary Education (with Teacher Certification) (p. 194)

Post-Baccalaureate Certificate

- Certificate in Elementary Education (with Teacher Certification) (p. 197)

Bachelor of Arts in Elementary Education (with Teacher Certification)

The BA in Elementary Education is a professional degree nationally recognized by the Association of Childhood Education International (ACEI). Unique features of the program include an emphasis on culturally responsive teaching in Alaska's context; a strong liberal studies focus; exposure to a range of teaching and curriculum design approaches, including integration of educational technology; and focused field experiences, developmentally sequenced and in a variety of school/classroom settings. Applicants are encouraged to take EDFN A101 to learn more about the field of education. Elementary Education supports an honors track option. See an advisor for course guidance.

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53). Application forms are available on the Admissions website (<http://www.uaa.alaska.edu/admissions>).

Admission to the College of Arts and Sciences School of Education, Department of Teaching and Learning: Elementary Major

Admission to the Department of Teaching and Learning: Elementary Major is required for most upper-division coursework in Elementary Education. In order to be admitted to the program, students must:

1. Complete the application to the Department of Teaching and Learning: Elementary Major. Meet with an academic advisor in the School of Education Student Services Office.
2. Complete the tier I basic college-level skills General Education Requirements (GERs). Transfer credits may be used.
3. Have a minimum cumulative GPA of 3.00.
4. Successfully complete the Praxis Core Academic Skills for Educators (Core). Contact the School of Education Student Services Office for current passing scores.
5. Successfully complete the following courses with a minimum grade of C: EDEL A205 and EDSE A212.
6. Submit a successful background check with the Alaska Background Check System (ABCS). Please visit School of Education Field Experiences website for detailed information.

Admission to the university as an elementary education major does not guarantee admission to the Department of Teaching and Learning: Elementary Education program.

Admission to Elementary Education Advanced Practicum

1. Meet all the requirements for and be admitted to the Department of Teaching and Learning: Elementary Education major.
2. Submit an application form for admission to Elementary Education Advanced Practicum. Contact the School of Education Student Services office for fall and spring application deadlines at (907) 786-4401.
3. Participate in a screening interview if requested.
4. Complete all 300-level and prerequisite courses, including completion of practicum I courses, EDEL A325, EDEL A327, and EDEL A395, with a minimum grade of C.
5. Have a minimum cumulative GPA of 3.00.
6. Have a minimum GPA of 3.00 in major requirements.
7. Apply for the Student Teaching Authorization Certificate. This application includes fingerprinting and a criminal background check. Fee required. Contact School of Education Student Services Office for more information.

Admission to Elementary Education Internship (Student Teaching Experience)

1. A grade of P in the practicum courses EDEL A395 and EDEL A495A and a minimum grade of C in practicum courses EDEL A325, EDEL A327, EDEL A492A, EDEL A426, and EDEL A428.
2. Successfully complete the Praxis II: Elementary Content Knowledge (5018) or Praxis II: Curriculum, Instruction, and Assessment (5017). Contact the School of Education Student

Services Office for current passing scores. *Note: when taking the exam, please select UAA as a receiving institution.*

3. Submit an application form for admission to Elementary Education Internship. Contact the School of Education Student Services office for fall and spring application deadlines at (907) 786-4401.
4. Maintain a current Student Teaching Authorization Certificate.
5. Complete school district specific application for internship placement. See the School of Education Student Services Office for more information.

Placement in Field Experiences

Placement in field experiences is separate from admission to the program and may be limited by community partners. See School of Education Field Placement website (<https://www.uaa.alaska.edu/academics/college-of-education/student-services/field-experiences.cshtml>). Applications for EDEL A495A and elementary internship courses must be submitted the semester before enrolling in EDEL A495A, Elementary Education Practicum II, and elementary internship, respectively. Qualified applicants are accepted on a space-available basis. Admission to the Elementary Education program does not guarantee admission to the field experiences.

Some courses in the elementary education program require field placements and/or internship placements. School of Education does not guarantee placements as they are contingent on school district and agency partners. The university offers placements across the state of Alaska. Out-of-state placements will require additional approvals and are not guaranteed. In addition, residents in some states who seek to enroll in University of Alaska (UA) online programs and/or complete an internship in their home state related to UA enrollment need to be aware of special requirements. Please see www.uaa.alaska.edu/elearning (<https://www.uaa.alaska.edu/elearning>) for details.

The Elementary Education Programs Admission Committee determines a candidate's readiness to enroll in all field experiences. The candidate must realize that requirements set forth below constitute minimum preparation, and it may be the judgment of the committee that the candidate needs further work to develop content knowledge or skills to work with children in field placements.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the background check requirements listed under Field Placements (p. 185).
- Complete the foundations and major requirements listed below.

Foundations Requirements

Complete the following foundation requirements. While students may choose any course from the approved General Education Requirements (GERs) course lists, the following courses listed are highly recommended choices to provide content knowledge for

elementary education majors. Some of the foundation courses may also be used to meet GERs.

Code	Title	Credits
Written Communication Skills GER		
Select two GER courses. The following courses are highly recommended:		6
WRTG A111	Writing Across Contexts	
WRTG A211	Writing and the Humanities	
WRTG A212	Writing and the Professions	
Oral Communication Skills GER		
Select one GER course. The following courses are highly recommended:		3
COMM A111	Fundamentals of Oral Communication	
COMM A235	Small Group Communication	
COMM A241	Public Speaking	
Quantitative Skills GER		
Select one GER course. The following courses are highly recommended:		3-4
MATH A121	College Algebra for Managerial and Social Sciences	
MATH A151	College Algebra for Calculus	
STAT A200	Elementary Statistics	
Fine Arts GER		
Select one GER course. The following courses are highly recommended:		3
ART A160	Art Appreciation	
MUS A121	Music Appreciation	
THR A111	Theatre Appreciation	
Natural Sciences GER		
Select three GER courses from different disciplines and at least one science lab from the Natural Sciences GER list. The following courses are highly recommended:		10-12
ASTR A103	Solar System Astronomy	
ASTR A103L	Solar System Astronomy Laboratory	
BIOL A102	Introductory Biology	
BIOL A103	Introductory Biology Laboratory	
ENVI A211	Environmental Science: Systems and Processes	
ENVI A211L	Environmental Science: Systems and Processes Laboratory	
Social Sciences GER		
Select three GER courses. The following courses are highly recommended:		9
ANTH A250	The Rise of Civilization	
PSY A150	Lifespan Development	
CEL A292	Introduction to Civic Engagement	
Humanities GER		
Select one of the following GER courses:		3

HIST A131	History of the United States I	
or HIST A132	History of the United States II	
or HIST A355	Major Themes in US History	
Select two additional GER courses. The following courses are highly recommended (Note: languages may be used to satisfy this requirement):		6
HUM A211	Introduction to Humanities I	
ENGL A121	Introduction to Literature	
ENGL A201	Masterpieces of World Literature I	
Quantitative Reasoning		6
MATH A211	Mathematics for Elementary School Teachers I	
MATH A212	Mathematics for Elementary School Teachers II	
Total Credits		49-52

Major Requirements

It is strongly recommended that students see an advisor to stay on track. Field experiences in public schools are required as part of most courses. All courses in the major must be completed with a minimum grade of C.

Code	Title	Credits
EDEL A205	Becoming an Elementary Teacher	3
EDEL A206	Introduction to Assessment in Elementary Education	2
or EDFN A210	Assessment-Based Online Tutoring	
EDEC A242	Family and Community Partnerships *	3
or HNRS A310	Community Service: Theory and Practice	
EDFN A101	Introduction to Education	3
EDFN A300	Philosophical and Social Context of American Education	3
or EDFN A304	Comparative Education	
EDFN A301	Foundations of Literacy and Language Development	3
EDFN A302	Foundations of Educational Technology	3
EDFN A478	Issues in Alaska Native Education, K-12	3
EDSE A212	Human Development and Learning	3
EDSE A482	Inclusive Classrooms for All Children	3
Methods Courses		
EDEC A106	Creativity and the Arts in Early Childhood	3
EDEL A325	Teaching Literacy in Elementary Schools	6
EDEL A327	Teaching Social Studies in Elementary Schools	3
EDEL A426	Teaching Mathematics in Elementary Schools	3

EDEL A428	Teaching Science in Elementary Schools	3
PEP A345	Incorporating Health and Physical Activity into the Pre-K - 6 Classroom	2
Field Experience and Internship		
EDEL A395	Elementary Education Practicum I: Literacy and Social Studies	2
EDEL A492A	Elementary Education Seminar II: Learning Environment	2
EDEL A492B	Elementary Education Seminar III: Teaching Capstone	3
EDEL A495A	Elementary Education Practicum II: Learning Environment, Mathematics, Science	3
EDEL A495B	Elementary Education Internship	9
Electives *		9
Total Credits		77

* Electives may be used toward a minor which is issued concurrently with a baccalaureate degree. Minors consist of a minimum of 18 credits. Students are encouraged to consult with an advisor about adding a minor.

A minimum of 126 credits is required for the degree, of which 42 credits must be upper-division.

BAEL and Honors College Option

Visit the University Honors College catalog page. See an advisor for details.

State Approved Verification Form, Elementary Teacher Certification (K-6)

Students completing this degree are eligible for an institutional recommendation for teacher certification K-6th grade from the Alaska Department of Education. Following are the requirements for a State Approved Verification Form:

1. Major requirements completed with a minimum grade of C.
2. Cumulative GPA of 3.00.
3. Cumulative GPA of 3.00 in all major requirements, EDSE A212, MATH A211, MATH A212, and the Alaska studies and multicultural courses.
4. Passing scores on the Praxis I and Praxis II exams.
5. Internship satisfactorily completed.
6. BA in Elementary Education degree conferred.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Student Learning Outcomes

Students graduating with a Bachelor of Arts in Elementary Education will be able to:

- Construct learning opportunities that support K-6 students' development, acquisition of knowledge, and motivation.
- Design and implement curriculum that supports K-6 students' learning of language arts, science, mathematics, social studies, the arts, health, and physical education.
- Plan and implement instruction based on knowledge of K-6 students, learning, theory, curriculum, and community.
- Create appropriate instructional opportunities to address diversity.
- Use teaching strategies that encourage development of critical thinking and problem solving.
- Foster active engagement in learning and create supportive learning environments.
- Use effective communication strategies to foster inquiry and support interaction among K-6 students.
- Use formal and informal assessments to inform and improve instructional practice.
- Reflect on practice and engage in professional growth activities.
- Establish positive collaborative relationships with families, colleagues, and the community.

Post-Baccalaureate Certificate in Elementary Education (with Teacher Certification)

Those students who already have a baccalaureate degree may obtain an Elementary Education Post-Baccalaureate Certificate by completing the following requirements.

Admission Requirements

Admission to the University of Alaska Anchorage

Satisfy the Admission Requirements for Post-Baccalaureate Certificate Programs (p. 52). Complete the UAA Undergraduate Application for Admission, available on the UAA Admissions website (<http://www.uaa.alaska.edu/admissions>).

Admission to the School of Education (SOE), Department of Teaching and Learning, Elementary Education Post-Baccalaureate Certificate

In order to be admitted, applicants must meet the following requirements:

1. Complete an application to the Department of Teaching and Learning for admission to the Elementary Education Post-Baccalaureate Certificate program for fall or spring admission. (Please be aware that the admission deadlines for UAA may vary from those of the Department of Teaching and Learning. For financial aid purposes, applicants must adhere to the deadlines established for the UAA Undergraduate Application for

Admission). Contact SOE Student Services office for applications at (907) 786-4401.

2. Have a cumulative grade point average of 3.00 for the baccalaureate degree from a regionally accredited institution.
3. Have completed a course in child development. An example of an UAA course that meets this requirement is EDSE A212. An alternate course will also be considered.
4. Undergraduate preparation in content areas relevant to elementary education: English, mathematics, science, social sciences, art, physical education, and health.
5. Successfully complete the Praxis Core Academic Skills for Educators examination or other Alaska Early Education and Development (EED) approved basic competency exam requirement (www.eed.state.ak.us/TeacherCertification (<http://www.eed.state.ak.us/TeacherCertification>)). Contact the SOE Student Services Office for current passing scores.
6. Submit a successful background check with the Alaska Background Check System (ABCS). Please visit School of Education Field Experiences website for detailed information.

Admission to the program is competitive. Qualified applicants are accepted on a space-available basis.

Admission to Elementary Education Advanced Practicum

1. Meet all the requirements for and be admitted to the Department of Teaching and Learning in the Elementary Education program.
2. Submit an application form for admission to Elementary Education Advanced Practicum. Contact the School of Education Student Services office for fall and spring application deadlines at (907) 786-4401.
3. Participate in a screening interview, if requested.
4. Complete all 300 level and prerequisite courses, including completion of practicum I courses, EDEL A325, EDEL A327, and EDEL A395, with a 'C' or higher..
5. Have a minimum cumulative GPA of 3.00.
6. Have a minimum GPA of 3.00 in program requirements.
7. Apply for the Student Teaching Authorization Certificate. This application includes fingerprinting and a criminal background check. Fee required. Contact SOE Student Services for more information.

Admission to Elementary Education Internship

1. A grade of P in the practicum courses EDEL A395 and EDEL A495A and a grade of 'C' or higher in practicum courses EDEL A325, EDEL A327, EDEL A492A, EDEL A426, and EDEL A428.
2. Successfully complete one of the following Praxis II exams: Elementary Content Knowledge (5018) or Elementary Education: Curriculum, Instruction, and Assessment (5017). Contact the SOE Student Services Office for current passing scores. *Note: when taking the exam, please select UAA as a receiving institution.*

3. Submit an application form for admission to Elementary Education Internship. Contact the School of Education Student Services office for fall and spring application deadlines at (907) 786-4401.
4. Maintain a current Student Teaching Authorization Certificate.
5. Complete school district specific application for internship placement. See the SOE Student Services Office for more information.

Placement in Field Experiences

Admission to field experiences is separate from admission to the program and may be limited by community partners. See the Field Placements (p. 185) link on the School of Education page. Applications for EDEL A495A and elementary internship courses must be submitted by the semester before enrolling in EDEL A495A. Qualified applicants are accepted on a space-available basis. Admission to the Department of Undergraduate and Initial Certification does not guarantee admission to the field experiences.

Some courses in the elementary education program require field placements and/or internship placements. SOE does not guarantee placements as they are contingent on school district and agency partners. The university offers placements across the state of Alaska. Out-of-state placements will require additional approvals and are not guaranteed. In addition, residents in some states who seek to enroll in University of Alaska (UA) online programs and/or complete an internship in their home state related to UA enrollment need to be aware of special requirements. Please see www.uaa.alaska.edu/elearning (<https://www.uaa.alaska.edu/elearning>) for details.

The Elementary Programs Admission Committee determines a candidate's readiness to enroll in all field experiences. The candidate must realize that requirements set forth below constitute minimum preparation, and it may be the judgment of the committee that the candidate needs further work to develop content knowledge or skills to work with children in field placements.

Academic Requirements

All Elementary Education Post-Baccalaureate Certificate courses must be completed with a grade of 'C' or higher in order to obtain an institutional recommendation for elementary teacher certification.

Graduation Requirements

- Complete the General University Requirements for Post-Baccalaureate Certificates (p. 97).
- Complete the Background Check Requirements as outlined in Field Placements (p. 185) located in the overview of the School of Education.
- Complete the program requirements below.

Program Requirements

It is recommended that candidates complete EDFN A101 prior to enrolling in a 300-level education course.

Code	Title	Credits
Core Courses		
Field experience in public schools required as part of most courses.		
EDFN A300	Philosophical and Social Context of American Education	3
or EDFN A304	Comparative Education	
EDFN A301	Foundations of Literacy and Language Development	3
EDFN A478	Issues in Alaska Native Education, K-12	3
EDSE A482	Inclusive Classrooms for All Children	3
Method Courses		
Concurrent enrollment in a practicum is required. See an advisor for details.		
EDEL A325	Teaching Literacy in Elementary Schools	6
EDEL A327	Teaching Social Studies in Elementary Schools	3
EDEL A426	Teaching Mathematics in Elementary Schools	3
EDEL A428	Teaching Science in Elementary Schools	3
Practicums, Seminars and Internship		
EDEL A395	Elementary Education Practicum I: Literacy and Social Studies	2
EDEL A492A	Elementary Education Seminar II: Learning Environment	2
EDEL A492B	Elementary Education Seminar III: Teaching Capstone	3
EDEL A495A	Elementary Education Practicum II: Learning Environment, Mathematics, Science	3
EDEL A495B	Elementary Education Internship	6-9
Total Credits		43-46

A minimum of 43-46 credits is required for the certificate. A minimum of 29 approved credits, including the courses EDEL A395, EDEL A495A and EDEL A495B must be completed after the award of the baccalaureate degree.

State Approved Verification Form, Elementary Teacher Certification (K - 6)

Students completing this degree are eligible for an institutional recommendation for teacher certification K-6th grade from the Alaska Department of Education. Following are the requirements for a State Approved Verification Form:

1. All course requirements completed with a grade of C or higher.
2. Cumulative GPA of 3.00 in the Elementary Education Post-Baccalaureate Certificate courses.

3. Passing scores on the Praxis I and II examinations.
4. Internship satisfactorily completed.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Student Learning Outcomes

Students graduating with a Post-Baccalaureate Certificate in Elementary Education will be able to:

- Construct learning opportunities that support K-6 students' development, acquisition of knowledge, and motivation.
- Design and implement curriculum that supports K-6 students' learning of language arts, science, mathematics, social studies, the arts, health, and physical education.
- Plan and implement instruction based on knowledge of K-6 students, learning, theory, curriculum, and community.
- Create appropriate instructional opportunities to address diversity.
- Use teaching strategies that encourage development of critical thinking and problem solving.
- Foster active engagement in learning and create supportive learning environments.
- Use effective communication strategies to foster inquiry and support interaction among K-6 students.
- Use formal and informal assessments to inform and improve instructional practice.
- Reflect on practice and engage in professional growth activities.
- Establish positive collaborative relationships with families, colleagues, and the community.

Special Education

Professional Studies Building (PSB), Room 222C, (907) 786-6317

Programs of Study

Minor

- Minor in Early Childhood Special Education (p. 199)
- Minor in Speech-Language Pathology (p. 201)
- Minor in Elementary Special Education (p. 200)
- Minor in Secondary Special Education (p. 200)

Post-Baccalaureate Certificate

- Certificate in Speech-Language Pathology (p. 201)

Minor in Early Childhood Special Education

The Minor in Early Childhood Special Education provides candidates with the knowledge of intervention strategies and learning environments that support the development of young children with disabilities and developmental delays in the birth to age 5 range.

Completion of the Minor in Early Childhood Special Education in conjunction with completion of an initial teacher licensure program (i.e. Early Childhood Education or Elementary Education) leads to a Special Education Early Childhood Endorsement for Birth - PreK with the Alaska Department of Education and Early Development (DEED). Students majoring in another subject who wish to minor in early childhood special education would not be eligible for the endorsement through DEED.

Student must complete the following requirements.

Code	Title	Credits
Select one of the following:		3
EDEC A303	Young Children in Inclusive Settings	
EDSE A212	Human Development and Learning	
EDSL A303	Language Development Across the Lifespan	
PSY A348	Early Childhood Mental Health	
Complete the following courses:		
EDSE A311Y	Special Children from Birth through Five	3
EDSE A313Y	Positive Behavior Intervention and Supports for Early Childhood	3
EDSE A320Y	Assessment in Early Childhood Special Education	3
EDSE A422Y	Strategies: Infants & Toddler Special Education	3
EDSE A423Y	Strategies: Preschool Special Education	3
EDSE A495Y	Field Experience in Early Childhood Special Education	3
Total Credits		21

A total of 18 credits are required for the minor.

Program Student Learning Outcomes

Upon completion of the program students will be able to:

1. Identify historical and legal factors that have contributed to the current educational context of young children with disabilities and their families.
2. Conduct appropriate assessments use with young children and families and determine individual learning needs, including needs of culturally and linguistically diverse children, children with identified disabilities and developmental delays, and those at-risk of developmental delays.
3. Develop and implement appropriate instructional programming for students using evidence-based strategies and interventions.
4. Create environments that promote child development and learning.
5. Collect and evaluate child assessment data and outcomes and make data-based decisions about individual programming modifications.

6. Communicate and collaborate with professional colleagues and parents and family members to maximize positive student outcomes.

Minor in Elementary Special Education

The Minor in Elementary Special Education provides candidates with the knowledge of assessment and intervention strategies that support the learning of children with exceptional learning needs in the K - 8 curriculum.

Code	Title	Credits
EDSE A336	Classroom Guidance and Behavior Management	3
EDSE A410	Clinical Assessment: Eligibility and Program Planning	3
EDSE A412	Curriculum and Strategies I: Low Incidence	3
EDSE A422	Curriculum and Strategies II: High Incidence	3
EDSE A425	Math for Special Learners	3
EDSE A483	Language and Literacy: Assessment and Interventions	3
EDSE A484	Collaboration and Partnerships Between Families and Professionals	3
EDSE A495A	Field Experience in Special Education: Elementary	3
Total Credits		24

A total of 24 credits are required for the minor.

Program Student Learning Outcomes

Upon completion of the program students will be able to:

- Evaluate assessment outcomes to identify individual learning differences of students with exceptional learning needs in the K - 8 classroom.
- Use the results of assessment to individualize instruction to meet the individual learning needs of culturally diverse students in inclusive settings.
- Support a positive and culturally responsive social environment for all students in inclusive settings.
- Promote collaboration amongst parents and professionals to support students with exceptional learning needs.

Minor in Secondary Special Education

The Minor in Secondary Special Education provides candidates with the knowledge of assessment and intervention strategies that support the learning of children with exceptional learning needs in the 7-12 curriculum.

Code	Title	Credits
EDSE A336	Classroom Guidance and Behavior Management	3
EDSE A410	Clinical Assessment: Eligibility and Program Planning	3
EDSE A412	Curriculum and Strategies I: Low Incidence	3
EDSE A422	Curriculum and Strategies II: High Incidence	3
EDSE A425	Math for Special Learners	3
EDSE A483	Language and Literacy: Assessment and Interventions	3
EDSE A486	Transition Planning for Secondary Students with Disabilities	3
EDSE A495B	Field Experience in Special Education: Secondary	3

A minimum of 24 credits is required for the minor.

Upon completion of the program students will be able to:

- Evaluate assessment outcomes to identify individual learning differences of students with exceptional learning needs in the 7 - 12 classroom.
- Use the results of assessment to individualize instruction to meet the individual learning needs of culturally diverse students in inclusive settings.
- Support a positive and culturally responsive social environment for all students in inclusive settings.
- Promote collaboration amongst parents and professionals to support students with exceptional learning needs.

Minor in Speech-Language Pathology

The Minor in Speech-Language Pathology provides candidates with an overview of the nature of human communication, including its origin, development and process. Candidates will also be introduced to common communication disorders and their impact on communication across the lifespan. The minor allows students to prepare for graduate study in speech-language pathology.

Note: The affiliated program in communication sciences and disorders through East Carolina University has requirements in addition to coursework required for the Minor in Speech-Language Pathology. Students are advised to contact a School of Education advisor for details.

Students majoring in another subject who wish to minor in speech-language pathology must complete the following requirements.

Code	Title	Credits
EDSL A201	Foundations of Communication Disorders	3
EDSL A301	Anatomy and Physiology of Speech and Hearing	3

EDSL A302	Phonetics	3
EDSL A303	Language Development Across the Lifespan	3
EDSL A401	Phonology and Articulation Development and Disorders	3
EDSL A402	Audiology	3
EDSL A403	Aural Rehabilitation	3
Total Credits		21

A total of 21 credits is required for this minor.

Program Student Learning Outcomes

Upon completion of the program students will be able to:

1. Recognize typically developing speech and language skills across the lifespan.
2. Compare and contrast the impact of physiological variables (respiration, phonation, resonance, articulation, mentation, audition) on communication.
3. Identify common disorders that affect the ability to communicate across the lifespan.
4. Critically evaluate the impact of speech, language and hearing disorders on communication processes across the lifespan.
5. Critically evaluate issues pertaining to cultural and linguistic diversity.

Post-Baccalaureate Certificate in Speech-Language Pathology

The Post-Baccalaureate Certificate in Speech-Language Pathology prepares professionals who already have baccalaureate degrees for application to graduate programs in speech-language pathology. A master's degree would prepare them to work with clients across the lifespan.

Those students who already have a baccalaureate degree may obtain a Speech-Language Pathology Post-Baccalaureate Certificate by completing the following requirements.

Admission Requirements

Satisfy the Admission Requirements for Post-Baccalaureate Certificate Programs (p. 52). Complete the UAA Undergraduate Application for Admission, available on the UAA Admissions website (<http://www.uaa.alaska.edu/admissions>).

Admission to the College of Arts and Sciences School of Education, Special Education Department

In order to be admitted to the School of Education as a Speech-Language Pathology Post-Baccalaureate Certificate Program candidate, applicants must meet the following requirements:

1. Complete a departmental application for admission to the program by one of the following dates: March 1, August 1 or November 1. Please be aware that the admission deadlines for UAA may vary

from those of the Special Education Department. For financial aid purposes, applicants must adhere to the deadlines established for the UAA Undergraduate Application for Admission.

2. Have a cumulative grade point average of 2.75 for the baccalaureate degree.

Academic Requirements

All courses must be completed with a grade of C or higher.

Graduation Requirements

- Complete the University Requirements for Post-Baccalaureate Certificates (p. 97).
- Complete the Major Requirements below. Satisfaction of all major requirements must be demonstrated through coursework completed after the award of the student's first baccalaureate degree.

Major Requirements

Code	Title	Credits
EDSL A301	Anatomy and Physiology of Speech and Hearing	3
EDSL A302	Phonetics	3
EDSL A303	Language Development Across the Lifespan	3
EDSL A401	Phonology and Articulation Development and Disorders	3
EDSL A402	Audiology	3
EDSL A403	Aural Rehabilitation	3
EDSL A410	Speech Science	3
EDSL A411	Neurological Foundations of Speech and Hearing	3
Total Credits		24

A total of 24 credits is required for the certificate.

Program Student Learning Outcomes

Students graduating with a Post-Baccalaureate Certificate in Speech Language Pathology will be able to:

1. Identify anatomical structures and physiological processes that support the communication and swallowing processes.
2. Describe the role of the systems of respiration, phonation, and articulation/resonance in the production of a spoken word.
3. Identify milestones in normal speech and language development.
4. Identify common disorders that affect the ability to communicate.
5. Discuss the impact of culturally and linguistically diverse backgrounds on speech and language development and determination of speech or language difference vs. disorder.

College of Engineering

www.uaa.alaska.edu/collegeofengineering (<http://www.uaa.alaska.edu/collegeofengineering>)

Engineering embraces the wide range of cultural and technical subjects related to the planning, design and manufacture, or construction of objects necessary for civilization. An engineer is an innovator, a builder and a problem solver. Engineers turn scientific knowledge into useful goods and services and are responsible to society for their engineering design decisions. They are interested in working with people often as team members in positions of leadership. Engineers are concerned about people and ways to provide society with improved living standards.

Students may choose from the following undergraduate programs:

- A four-year program leading to a Bachelor of Science in Civil Engineering
- A four-year program leading to a Bachelor of Arts or a Bachelor of Science in Computer Science
- A four-year program leading to a Bachelor of Science in Computer Systems Engineering
- A four-year program leading to a Bachelor of Science in Electrical Engineering
- A four-year program leading to a Bachelor of Science in Mechanical Engineering
- A four-year program leading to a Bachelor of Science in Geomatics
- A two-year program leading to an Associate of Applied Science in Geomatics
- Minors in Computer Science, Computer Systems Engineering, Electrical Engineering, Geographic Information Systems and Mechanical Engineering.

Accreditation

The following programs are accredited by the Engineering Accreditation Commission of ABET (<http://www.abet.org>):

- Bachelor of Science, Civil Engineering
- Bachelor of Science, Computer Systems Engineering
- Bachelor of Science, Electrical Engineering
- Bachelor of Science, Mechanical Engineering

The Bachelor of Science in Geomatics is accredited by the Applied Science Accreditation Commission of ABET (<http://www.abet.org>).

The Bachelor of Science in Computer Science is accredited by the Computing Accreditation Commission of ABET (<http://www.abet.org>).

Civil Engineering

The Civil Engineering Department offers a Bachelor of Science (BS) in Civil Engineering (CE) to prepare students for the profession. Knowledge of mathematical and physical sciences gained by study, experience and practice is applied with judgment to develop ways to utilize materials and forces of nature for the progressive well-being of humanity. Students are prepared for improving and protecting the environment; providing facilities for community living, industry and transportation; and providing structures for the use of humanity. The Civil Engineering Department also offers a minor in Civil Engineering.

Computer Science

The Computer Science and Engineering Department offers a Bachelor of Arts (BA) and a Bachelor of Science (BS) in Computer Science (CS). Students learn the fundamental principles of computer science and important issues in computing so they may pursue advanced degrees or enter the workplace as productive, competent software development or information technology professionals. Graduates learn the necessary skills to solve a wide range of real-world problems using a variety of computing technologies and platforms and are prepared for a variety of professional opportunities involving computer technology. The Computer Science and Engineering Department also offers a minor in Computer Science.

Computer Systems Engineering

The Computer Science and Engineering Department offers a Bachelor of Science (BS) in Computer Systems Engineering (CSE). Graduates of the program have a solid foundation in the fundamental concepts of computer hardware and software design, electrical engineering, mathematics, and physics, and can apply these skills to solve real-world problems. Graduates are in a position to take advantage of a wide variety of professional opportunities available to computer systems engineers in industries including computer software, computer hardware, telecommunications, electronics, consulting, health care, aviation, energy, national defense, robotics and a broad spectrum of financial institutions. The Computer Science and Engineering Department also offers a minor in Computer Systems Engineering.

Electrical Engineering

The Electrical Engineering Department offers a Bachelor of Science (BS) in Electrical Engineering (EE). Graduates of the program have a solid foundation in mathematics, physics and chemistry as well as computer programming fundamentals, circuit theory, signals analysis, electromagnetics, instrumentation and control theory. Upper-level students have the opportunity to select advanced engineering electives in computer design and interfacing, digital signal processing, antenna theory, power distribution and others. Graduates are in a position to take advantage of a wide variety of professional opportunities, including those that serve the infrastructure and energy needs of Alaskan communities, and are well prepared for an engineering career in a technologically changing world and for graduate programs in electrical engineering and related areas. The Electrical Engineering Department also offers a minor in Electrical Engineering.

Mechanical Engineering

The Mechanical Engineering Department offers a Bachelor of Science (BS) in Mechanical Engineering (ME). Graduates of the program have a solid foundation in mathematics, physics and chemistry as well as engineering mechanics, materials science, thermodynamics and heat transfer. That foundation serves as the basis for interdisciplinary design, teamwork, and for lifelong learning. Upper-level students have the opportunity to select from advanced electives in fatigue and fracture; vibrations; renewable energy systems; composite materials; heating, ventilating, air-conditioning and refrigeration (HVAC&R); and others. Graduates are in a position to take advantage of a wide variety of professional opportunities, including those that serve the infrastructure

and energy needs of Alaskan communities, and are well prepared for an engineering career in a technologically changing world and for graduate programs in mechanical engineering and related areas. The Mechanical Engineering Department also offers a minor in Mechanical Engineering.

Geomatics

The Department of Geomatics offers a two-year Associate of Applied Science (AAS) in Geomatics, a four-year Bachelor of Science (BS) in Geomatics, and a minor in Geographic Information Systems (GIS). Geomatics embraces the traditional disciplines of land surveying, mapping, geodesy, photogrammetry and hydrography, together with the newer disciplines of remote sensing, digital photogrammetry, and spatial or geographic information systems (GIS). Geomaticians help design, map and manage the natural and the man-made resources of the earth. Their skills and efforts are important in project development and environmental protection. They gather, analyze and manipulate data; map results; and help design new developments. The disciplines used in geomatics are based on advancing technologies and use an integrated approach to the acquisition, analysis, storage, distribution, management and application of spatially referenced data.

Engineering Building (ENGR), Room 201, (907) 786-1900
www.uaa.alaska.edu/collegeofengineering (<http://www.uaa.alaska.edu/collegeofengineering>)

Preparation

While in high school, students can prepare for entering and succeeding in the university engineering program. In order to be the best prepared, students should complete the following high school courses with grades of C or better:

Code	Title	Credits
Algebra	2 years	
Chemistry	1 year	
English	3 years	
Physics	1 year	
Trigonometry	1/2 year	

Students successfully completing the above courses should be prepared to enroll in the first year of courses that count toward the engineering degree. Students without the above preparatory courses will need to take equivalent university courses before taking some of the first year of courses that count toward the engineering degree.

Civil Engineering

Engineering Building (ENGR), Room 201, (907) 786-1900
www.uaa.alaska.edu/collegeofengineering (<http://www.uaa.alaska.edu/collegeofengineering>)

Civil engineering is a professional discipline recognized by licensure in each of the 50 states and many other countries. Civil engineering is a broad branch of engineering dedicated to providing civilization with essential infrastructure and services, including bridges, buildings, ports, water resource development, waste disposal, dams, water power, irrigation and drainage works, roads, airports, railways,

construction and management services, surveying, and providing city management and developmental planning. Civil engineering students are introduced to principles of mathematics, chemistry and physics during their first two years of study. The third year of study is largely devoted to courses in applied extensions of the basic sciences to form the foundation for more advanced engineering analysis and design. Students draw upon previous learning in their senior year to focus their studies on sophisticated analyses and creative designs. Throughout the four-year engineering program students take courses in communication, humanities, social sciences and fine arts to improve their communication skills and to become more aware of their roles and responsibilities in modern society. The UAA civil engineering program emphasizes northern region design considerations and provides specialized training appropriate for an engineering career in Alaska and other cold regions of the world.

Civil Engineering Department Mission

The mission of the Civil Engineering Department, through its undergraduate and graduate education programs, its professional development programs, its research, and its service, is to advance the civil engineering profession in Alaska and elsewhere for building a sustainable civilization with utmost respect for the well-being of its peoples and the environment.

Program Objectives

The curriculum of the UAA CE program is designed to produce graduates who, within five years of graduation, will:

1. Practice with responsible charge in the civil engineering sub-disciplines of water resources, geotechnical, structural, transportation and environmental engineering, with emphasis on cold region issues. Responsible charge is as defined by the Alaska Professional Engineering licensing regulations.
2. Make contributions in project planning, preparation, implementation, design and presentation in a team environment in sub-discipline areas.
3. Demonstrate and update their competency via professional registration, continuing education, graduate study and professional service to their communities.
4. Exemplify the ethical standards of the profession.

Programs of Study

Bachelor of Science

- BS in Civil Engineerin (p. 204)g

Faculty

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Bachelor of Science in Civil Engineering

The Department of Civil Engineering offers a Bachelor of Science in Civil Engineering. The first two years of the program apply to most other branches of engineering.

Admission Requirements

Applicants for admission who, in addition to the Application and Admission Requirements for Baccalaureate Programs (p. 53), have completed the high school preparation curriculum listed below (or their university equivalents) with grades of C or better will be admitted to the civil engineering program.

High School Preparation Curriculum

While in high school, students can prepare for entering and succeeding in the civil engineering program. In order to be the best prepared, students should complete the following high school curriculum with grades of C or better:

Category	HS Class
Algebra	2 years
Chemistry	1 year
English	3 years
Physics	1 year
Trigonometry	1/2 year

Students successfully completing the above curriculum will be prepared to enroll in the first year of courses that count toward the engineering degree. Students without the above preparatory curriculum will need to take equivalent university courses before taking some of the first-year courses that count toward the engineering degree. Students are encouraged to work with their faculty advisors for developing a course plan.

Advising

All undergraduate students, as a part of the mandatory advising plan of the department, must meet with their faculty advisor at least once in an academic year to review their academic progress and future course plan. It is particularly important for students to meet with their faculty advisor whenever academic difficulties arise.

Academic Requirements

Any given CE or ES course may only be taken when prerequisites for the course are met with a grade of C or higher. A student who is unable to earn a grade of C or better in a CE or ES prerequisite course may attempt to earn a satisfactory grade one additional time on a space-available basis. Failure to earn a grade of C or better on the second attempt may result in removal from the civil engineering program.

A student who has a semester GPA in engineering courses below 2.00 will be placed on academic warning by the College of Engineering. A student on academic warning that receives a semester GPA in engineering courses of at least 2.00 will be removed from academic warning status by the college. Otherwise, he or she will be removed from the civil engineering program and will not be permitted to enroll in CE and ES courses.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements (GERs) for Baccalaureate Degrees (p. 86).
- Complete the major requirements below. Some major requirements may be used to satisfy GERs.

Major Requirements

Code	Title	Credits
Complete the following courses with a minimum GPA of 2.00:		
CE A201	Introduction to Civil Engineering	1
CE A310 & A310L	Introduction to Geotechnical Engineering and Introduction to Geotechnical Engineering Lab	4
CE A334 & A334L	Properties of Materials and Properties of Materials Laboratory *	3
CE A341	Environmental Engineering	3
CE A351	Structural Analysis	3
CE A403	Arctic Engineering	3
CE A420	Fundamentals of Transportation Engineering	3
CE A437	Project Planning *	1
CE A438	Design of Civil Engineering Systems	3
CE A461	Hydraulic Analysis and Design	3
CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory *	4
CHEM A106 & A106L	General Chemistry II and General Chemistry II Laboratory *	4
ENGR A151	Introduction to Engineering *	1
ES A103	Engineering Graphics	3
ES A209	Statics *	3
ES A210	Dynamics *	3
ES A261	Introduction to Engineering Computation	3
ES A302	Engineering Data Analysis *	3
ES A331	Mechanics of Materials *	3

ES A341 & A341L	Fluid Mechanics and Fluid Mechanics Laboratory *	4
ESM A450	Economic Analysis and Operations *	3
GEO A155	Introduction to Surveying *	3
MATH A251	Calculus I *	4
MATH A252	Calculus II *	4
MATH A253	Calculus III *	4
MATH A302	Ordinary Differential Equations *	3
PHIL A305	Professional Ethics	3
PHYS A211 & A211L	General Physics I and General Physics I Laboratory *	4
PHYS A212 & A212L	General Physics II and General Physics II Laboratory *	4
WRTG A212	Writing and the Professions	3

Discipline-Specific Courses

Complete 12 credits of discipline-specific courses from the following list in the disciplines of environmental, geotechnical, structural, transportation and water resources engineering. At least one course must be taken in four of the five disciplines.

Environmental Engineering

CE A442 Environmental Engineering Design

Geotechnical Engineering

CE A410 Foundation Engineering

Structural Engineering

CE A432 Steel Design

CE A433 Reinforced Concrete Design

Transportation Engineering

CE A421 Design of Highways

Water Resources Engineering

CE A464 Hydrologic Analysis and Design

Basic Science Elective

Select one of the following: 3

BIOL/GEOL A178 Fundamentals of Oceanography

BIOL A271 Principles of Ecology

GEOL A111 Physical Geology

GEOL A115 Environmental Geology

Technical Electives

Complete 6 credits of technical elective courses from the following list. Graduate courses may not be applied to both a baccalaureate and master's degree. ** 6

Environmental Engineering

AEST A601 Aquatic Process Chemistry

CE A445 Chemical and Physical Water and Wastewater Treatment Processes

CE A446 Biological Treatment Processes

CE A447 Advanced Unit Processes

Geotechnical Engineering

CE A414	Soil Strength and Slope Stability
CE A611	Geotechnical Earthquake Engineering
CE A612	Advanced Foundation Design
Structural Engineering	
CE A432	Steel Design ***
or CE A433	Reinforced Concrete Design
CE A451	Advanced Structural Analysis
CE A454	Timber Design
CE A631	Structural Finite Elements
CE A652	Advanced Steel Design
Transportation Engineering	
CE A423	Traffic Engineering
CE A424	Pavement Design
CE A425	Highway Engineering
CE A426	Traffic Modeling and Simulation
Water Resources Engineering	
CE A462	Surface Water Dynamics
CE A475	Design of Ports and Harbors
CE A476	Coastal Engineering
CE A479	Sediment Transport and Coastal Processes
CE A663	Ground Water Dynamics
CE A674	Waves, Tides, and Ocean Processes for Engineers
Total Credits	114

* Must be completed with a minimum grade of C.

** Students are encouraged to take 6 credits from a single subdiscipline.

*** Either CE A432 or CE A433 may be chosen as a technical elective if not applied to satisfy the requirements described above.

A total of 132 credits is required for the degree, of which 42 credits must be upper-division (300-, 400- or 600-level).

Honors in Civil Engineering

Undergraduate civil engineering students may be recognized for exceptional performance by earning departmental honors in civil engineering. In order to receive honors in civil engineering, a student must meet each of the following requirements:

1. Complete all requirements for a BS in Civil Engineering. A minimum of 30 credits applicable to the civil engineering degree must be completed at UAA.
2. Be an active member for at least one year of both a national and an on-campus student chapter of a professional engineering society that addresses issues relevant to the civil engineering profession.
3. Have a GPA of 3.30 or higher in courses applicable to the BS in Civil Engineering.
4. Gain approval for a departmental honors design or research project prior to applying for graduation. Present an oral presentation and

written report of project results eight weeks prior to scheduled graduation. The project proposal and final written report must be approved by the student's academic advisor and the chair of Civil Engineering Department.

5. Pass the Fundamentals of Engineering Examination in or prior to the fall semester of the senior year.
6. Document a minimum of eight weeks work experience in an engineering or engineering-related position.

Licensure and/or Certification

Graduates of the Bachelor of Science in Civil Engineering gain four years of education credit toward obtaining a Professional Engineer license in Alaska.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Student Learning Outcomes

In keeping with the above objectives, it is expected that graduates of the UAA Civil Engineering program will have:

- An ability to apply knowledge of mathematics through differential equations, probability and statistics, calculus-based physics, and general chemistry.
- An ability to apply knowledge in a minimum of four recognized major civil engineering areas.
- An ability to design and conduct experiments, as well as to analyze and interpret data, in more than one of the recognized major civil engineering areas.
- An ability to design a civil engineering system, component, or process to meet desired needs.
- An ability to function on multidisciplinary teams.
- An ability to identify, formulate, and solve engineering problems.
- An understanding of professional and ethical responsibility.
- An ability to communicate effectively.
- The broad education necessary to understand the impact of engineering solutions in a global and societal context.
- A recognition of the need for, and an ability to engage in, lifelong learning.
- A knowledge of contemporary issues in professional practice.
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Computer Science

Engineering and Computation Building (ECB), Room 308, (907) 786-1900

www.uaa.alaska.edu/computerscienceandengineering (<http://www.uaa.alaska.edu/computerscienceandengineering>)

The Department of Computer Science and Engineering offers courses covering the major areas of computer science. These courses constitute the basis for an undergraduate major that prepares students for a

variety of professional and technical careers in business, industry and government, or for graduate work leading to advanced degrees. In addition, the department offers courses for students from other fields that will use computer science as a tool in their own areas.

The department offers two degrees in computer science: the Bachelor of Arts in Computer Science and the Bachelor of Science in Computer Science. The BA gives the student the opportunity to obtain a liberal arts background while the BS program gives the student the opportunity to pursue a sciences background. The BS is recommended for those seeking to pursue a graduate degree in computer science.

Both degrees prepare the student to pursue a professional career in the computing field and are based on the computing curriculum guidelines developed by the Accreditation Board for Engineering and Technology (ABET). The core of both degrees emphasizes broad fundamental principles of computer science and teaches the student the necessary skills to develop solutions using current or future technology. The core topics include computer programming, systems organization, software engineering, databases and theory. Upon completion of the core topics, the student may select electives that explore specific areas of computer science, such as computer graphics, architecture or intelligent systems.

Accreditation

The Bachelor of Science in Computer Science program is accredited by the Computing Accreditation Commission of ABET (<http://www.abet.org>).

Program Objectives

The computer science program has adopted the following educational program objectives for the Bachelor of Arts and the Bachelor of Science degrees in computer science. Graduates with these degrees will achieve some or all of these objectives within five years of graduation:

1. Make contributions to the computing profession and apply computational solutions to solve real-world problems.
2. Successfully adapt to changes in the field of computer science.
3. Meet or exceed the expectations of their employers and professional mentors as computer science professionals and advance in their career.
4. Be admitted to and successfully complete advanced degree programs.
5. Contribute to the Alaska economy through their professional accomplishments in computing.

Programs of Study

Bachelor of Arts

- BA in Computer Science (p. 207)

Bachelor of Science

- BS in Computer Science (p. 208)

Minor

- Minor in Computer Science (p. 209)

Faculty

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Bachelor of Arts in Computer Science

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Advising

Students are required to develop their program with a computer science advisor.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the major requirements below.

Major Requirements

Code	Title	Credits
Core Courses		
CSCE A201	Computer Programming I	4
CSCE A211	Computer Programming II	4
CSCE A222	Object-Oriented Programming I	3
CSCE/EE A241	Computer Hardware Concepts	4
CSCE A248	Computer Organization and Assembly Language Programming	3
CSCE A311	Data Structures and Algorithms	3
CSCE A321	Operating Systems	3
CSCE A331	Programming Language Concepts	3
CSCE A351	Automata, Algorithms and Complexity	3
CSCE A360	Database Systems	3
CSCE A365	Computer Networks	3
CSCE A401	Software Engineering	3
CSCE A465	Computer and Network Security	3
CSCE A470	Computer Science and Engineering Capstone Project	3

Required Support Courses

MATH A221	Applied Calculus for Managerial and Social Sciences	3-4
or MATH A251	Calculus I	
MATH A261	Introduction to Discrete Mathematics	3
STAT A253	Applied Statistics for the Sciences	4
or STAT A307	Probability and Statistics	
WRTG A212	Writing and the Professions	3
or Tier 1 GER WRTG A2W		
ENGL A313	Professional Writing	3
or ENGL A414	Research Writing	
or ENGL A478	Public Science Writing	
PHIL A305	Professional Ethics	3
Upper Division Credits **		12

** Complete an additional 12 upper-division credits in CSCE, MATH (excluding MATH A420 and MATH A495A), or STAT. Nine of these credits must be CSCE courses. A maximum of 3 credits of CSCE A395, a maximum of 3 credits of CSCE A495, and a maximum of 6 credits of CSCE A498 may be applied to degree requirements.

- A minimum grade of C must be received in all CSCE, MATH and STAT courses required to satisfy the above program requirements.
- All computer science majors must take a standardized test of knowledge of computer science approved by the CS faculty for the purpose of evaluating program effectiveness. There is no minimum score required for graduation. This test will normally be taken during the senior year.

A total of 120 credits is required for the degree, of which 42 credits must be upper-division.

Honors in Computer Science

Students majoring in computer science are eligible to graduate with departmental honors if they satisfy the following requirements:

1. Meet the requirements for Graduation with Honors (p. 38).
2. Meet the requirements for a BA in Computer Science.
3. Earn a grade point average of 3.50 or above in the major requirements.

Program Student Learning Outcomes

Students graduating with a Bachelor of Arts in Computer Science will be able to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts, including technical and non-technical audiences for business, end-user, client, and computing contexts.

4. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply computer science theory and software development fundamentals to produce computing-based solutions.

Bachelor of Science in Computer Science

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Advising

Students are required to develop their program with a computer science advisor.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the major requirements below.

Major Requirements

Code	Title	Credits
Core Courses		
CSCE A201	Computer Programming I	4
CSCE A211	Computer Programming II	4
CSCE A222	Object-Oriented Programming I	3
CSCE/EE A241	Computer Hardware Concepts	4
CSCE A248	Computer Organization and Assembly Language Programming	3
CSCE A311	Data Structures and Algorithms	3
CSCE A321	Operating Systems	3
CSCE A331	Programming Language Concepts	3
CSCE A351	Automata, Algorithms and Complexity	3
CSCE A360	Database Systems	3
CSCE A365	Computer Networks	3
CSCE A401	Software Engineering	3
CSCE A465	Computer and Network Security	3
CSCE A470	Computer Science and Engineering Capstone Project	3

Required Support Courses

MATH A251	Calculus I	4
MATH A252	Calculus II	4
MATH A261	Introduction to Discrete Mathematics	3

PHYS A123 & A123L	College Physics I and College Physics I Laboratory *	4
or PHYS A211 & A211L	General Physics I and General Physics I Laboratory	
PHYS A124 & A124L	College Physics II and College Physics II Laboratory *	4
or PHYS A212 & A212L	General Physics II and General Physics II Laboratory	
STAT A307	Probability and Statistics	4
WRTG A212	Writing and the Professions	3
or Tier 1 GER WRTG A2W		
ENGL A313	Professional Writing	3
or ENGL A414	Research Writing	
or ENGL A478	Public Science Writing	
PHIL A305	Professional Ethics	3

Upper-Division Courses

Complete an additional 12 upper-division credits in CSCE, MATH (excluding MATH A420 and MATH A495), or STAT. Nine of these credits must be in CSCE courses. A maximum of 3 credits of CSCE A395, a maximum of 3 credits of CSCE A495, and maximum of 6 credits of CSCE A498 may be applied to degree requirements.	12

* *Must be taken in addition to General Education Requirements.*

A minimum grade of C must be received in all CSCE, MATH and STAT courses required to satisfy the above program requirements.

All computer science majors must take a standardized test of knowledge of computer science approved by the CS faculty for the purpose of evaluating program effectiveness. There is no minimum score required for graduation. This test will normally be taken during the senior year.

A total of 120 credits is required for the degree, of which 42 credits must be upper-division.

Honors in Computer Science

Students majoring in computer science are eligible to graduate with departmental honors if they satisfy the following requirements:

1. Meet the requirements for Graduation with Honors (p. 38).
2. Meet the requirements for a BS in Computer Science.
3. Earn a grade point average of 3.50 or above in the major requirements.

Program Student Learning Outcomes

Students graduating with a Bachelor of Science in Computer Science will be able to:

Program Student Learning Outcomes

Students graduating with a Bachelor of Arts in Computer Science will be able to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts, including technical and non-technical audiences for business, end-user, client, and computing contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply computer science theory and software development fundamentals to produce computing-based solutions.

Minor in Computer Science

Students majoring in another subject who wish to minor in computer science must complete the following requirements:

Code	Title	Credits
CSCE A201	Computer Programming I	4
CSCE A211	Computer Programming II	4
CSCE A222	Object-Oriented Programming I	3
CSCE A311	Data Structures and Algorithms	3
MATH A261	Introduction to Discrete Mathematics	3
Additional CSCE prefix courses, 3 credits of which may be lower division		9
Total Credits		26

A total of 26 credits is required for the minor.

Computer Systems Engineering

Engineering Building (ENGR), Room 201, (907) 786-1900

www.uaa.alaska.edu/collegeofengineering (<http://www.uaa.alaska.edu/collegeofengineering>)

The Department of Computer Science and Engineering offers a Bachelor of Science in Computer Systems Engineering (BS CSE), and a Minor in Computer Systems Engineering. The baccalaureate program is fully accredited. Students are introduced to principles of mathematics and physics during the first two years of study along with introductory courses in fundamentals of computer hardware and programming. The third and fourth years consist of upper-division courses applicable to computer systems along with computer systems engineering electives in the area of the students' interests. Students complete a project-oriented capstone course where they will apply their knowledge in computer systems engineering to solve challenging problems. Students also take courses on written and oral communication, humanities, social sciences and fine arts to improve their communication skills and to put their profession into a broader societal context.

Accreditation

The Bachelors of Science in computer systems engineering, electrical engineering and mechanical engineering are accredited by the Engineering Accreditation Commission of ABET (<http://www.abet.org>).

Program Objectives

1. Graduates are successful practitioners of computer engineering in a variety of industries, government agencies and research/academic institutions, serving the state of Alaska as well as national/international needs.
2. Graduates exhibit high standards regarding ethical behavior and social responsibility.
3. Graduates successfully engage in lifelong learning experiences such as graduate education, short courses, technical talks, conferences, training programs, community groups, and writing and/or publishing papers.

Preparation

While in high school, students can prepare for entering and succeeding in the university engineering program. In order to be the best prepared, students should complete the following high school courses with grades of C or better:

Code	Title	Credits
Algebra	2 years	
Chemistry	1 year	
English	3 years	
Physics	1 year	
Trigonometry	1/2 year	

Students successfully completing the above courses should be prepared to enroll in the first year of courses that count toward the engineering degree. Students without the above preparatory courses will need to take equivalent university courses before taking some of the first year of courses that count toward the engineering degree.

Bachelor of Science

- BS in Computer Systems Engineering (p. 210)

Minor

- Minor in Computer Systems Engineering (p. 212)

Faculty

Martin Cenek, Assistant Professor, mcenek@alaska.edu

Kenrick Mock, Professor/Chair, kjmock@alaska.edu

Frank Moore, Professor, fwmoore@alaska.edu (fwmoore@alaska.edu)

Kirk Scott, Professor, kascott@alaska.edu

Frank Witmer, Assistant Professor, fwitmer@alaska.edu

Bachelor of Science in Computer Systems Engineering

Admission Requirements

1. Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).
2. Complete the high school preparation courses (p. 209) (or their university equivalents) with minimum grades of C.

Academic Requirements

All prerequisites for engineering courses must be completed with a minimum grade of C, and all courses listed in the major requirements must be completed with a minimum grade of C. A student who is unable to earn a grade of C or higher in any course offered by the college may attempt to earn a satisfactory grade one additional time on a space-available basis. Failure to earn a grade of C or higher on the second attempt may result in removal from the program. Re-admittance requires a letter of appeal from the student requesting re-admittance with an explanation of any mitigating factors and how these factors have been addressed. Re-admittance is subject to approval by the department chair of the program.

A student who has a semester GPA below 2.00 in the major requirements will be placed on academic warning by the program. If a student on academic warning status receives a semester GPA of at least 2.00 in the major requirements, that student will be removed from academic warning status by the program. Otherwise, if a student on academic warning status receives a semester GPA below 2.00 in the major requirements, the student will be dropped from the program and must reapply in order to continue in the program.

Academic Integrity

The program requires students to abide by the principles of academic integrity described in the Student Code of Conduct. Should suspected cases of academic misconduct occur, these cases may be submitted to the UAA Dean of Students Office, where the assistant director of student conduct reviews all allegations of academic misconduct. At the conclusion of the review, the assistant director of student conduct issues a notification of the findings and conclusions to the reporting faculty member, department chair and dean. Should a student from the program be found responsible for a case of academic misconduct by the UAA Dean of Students Office on two separate occasions, that student will be dropped from the program. Re-admittance requires a letter of appeal from the student requesting re-admittance with an explanation of any mitigating factors and how these factors have been addressed. Re-admittance is subject to approval by the department chair of the student's degree program.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86). Some courses listed as major requirements may also be used to satisfy General Education Requirements (GERs).

- Complete the major requirements below with a minimum grade of C.

Major Requirements

Code	Title	Credits
Core Courses		
CSCE A201	Computer Programming I	4
CSCE A211	Computer Programming II	4
CSCE/EE A241	Computer Hardware Concepts	4
CSCE A248	Computer Organization and Assembly Language Programming	3
CSCE A311	Data Structures and Algorithms	3
CSCE A321	Operating Systems	3
CSCE A342	Digital Circuits Design	3
CSCE A365	Computer Networks	3
CSCE A448	Computer Architecture	3
CSCE A465	Computer and Network Security	3
CSCE A470	Computer Science and Engineering Capstone Project	3
EE A203	Fundamentals of Electrical Engineering I	4
EE A333	Electronic Devices	4
EE A353	Circuit Theory	3
ESM A450	Economic Analysis and Operations	3
MATH A251	Calculus I	4
MATH A252	Calculus II	4
MATH A253	Calculus III	4
MATH A261	Introduction to Discrete Mathematics	3
MATH A302	Ordinary Differential Equations	3
PHIL A305	Professional Ethics	3
PHYS A211 & A211L	General Physics I and General Physics I Laboratory	4
PHYS A212 & A212L	General Physics II and General Physics II Laboratory	4
STAT A307	Probability and Statistics	4
WRTG A212	Writing and the Professions	3
Advanced Engineering Electives		
Complete 15 credits from the following: *		15
Any upper-division elective with a CSCE prefix		
EE/PHYS A314	Electromagnetics	
EE/PHYS A324	Electromagnetics II	
EE A324L	Electromagnetics Laboratory II	
EE A354	Engineering Signal Analysis	
EE A441	Integrated Circuit Design	
EE A451	Digital Signal Processing	
EE A462	Communication Systems	
EE A465	Telecommunications	
Total Credits		101

- * At least 6 credits must be from CSCE courses. A maximum of 3 credits from CSCE A395, a maximum of 3 credits from CSCE A495 and a maximum of 6 credits from CSCE A498 may be applied toward this degree requirement. Other relevant courses may be accepted by approved petition.

A total of 120 credits is required for the degree, of which 42 credits must be upper-division.

Honors in Computer Systems Engineering

Undergraduate students in the program may be recognized for exceptional performance by earning departmental honors. The award will be noted on their permanent university transcript. In order to receive departmental honors, a student must meet each of the following requirements:

1. Complete all program requirements.
2. Earn a GPA of 3.50 or above in the courses required for the major.
3. Gain approval for, complete and present a design or research project prior to applying for graduation. The project proposal, presentation and final written report must be approved by the program faculty.

Licensure and/or Certification

Graduates of the Bachelor of Science in Computer Systems Engineering gain four years of education credit toward obtaining a Professional Engineer license in Alaska.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Student Learning Outcomes

It is expected that graduates from the program will have:

- An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- An ability to communicate effectively with a range of audiences, including technical and non-technical audiences for business, end-user, client, and computing contexts.
- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.

- An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Minor in Computer Systems Engineering

Students majoring in another subject who wish to minor in computer systems engineering must complete the following requirements.

Code	Title	Credits
CSCE A201	Computer Programming I	4
CSCE A211	Computer Programming II	4
CSCE/EE A241	Computer Hardware Concepts	4
CSCE A248	Computer Organization and Assembly Language Programming	3
CSCE A311	Data Structures and Algorithms	3
Additional upper-division CSCE-prefixed courses		6
Total Credits		24

A total of 24 credits are required for the minor.

Electrical Engineering

Engineering Building (ENGR), Room 201, (907) 786-1900
www.uaa.alaska.edu/collegeofengineering (<http://www.uaa.alaska.edu/collegeofengineering>)

The Department of Electrical Engineering offers a Bachelor of Science in Electrical Engineering (BS EE), and a Minor in Electrical Engineering. The baccalaureate program is fully accredited. During the first two years of study, students are introduced to principles of mathematics, chemistry and physics, as well as basic circuit theory, digital logic and electrical devices. The third year of study largely focuses on fundamental electrical engineering concepts, including courses in signal analysis, electromagnetism, instrumentation and telecommunication. During the fourth year students take more advanced courses including technical electives that are more focused on electrical engineering analysis and design. Upper-division electives include courses in computer design, antenna theory, communication theory, power and control systems. Students also take courses on written and oral communication, humanities, social sciences and fine arts to improve their communication skills and to put their profession into a broader societal context.

Accreditation

The Bachelors of Science in computer systems engineering, electrical engineering and mechanical engineering are accredited by the Engineering Accreditation Commission of ABET (<http://www.abet.org>).

Program Objectives

1. To produce electrical engineering graduates with the training and skills to enter the job market or to continue their education by attending graduate school.
2. To produce graduates who will become business and community leaders in Alaska and throughout the world.
3. To produce graduates who will, through their training in electrical engineering and their commitment to their continuing education, become the entrepreneurs driving Alaska's growth in the future.
4. To produce graduates in electrical engineering who conduct themselves and practice their profession with the highest of professional standards.

Preparation

While in high school, students can prepare for entering and succeeding in the university engineering program. In order to be the best prepared, students should complete the following high school courses with grades of C or better:

Algebra 2 years

Chemistry 1 year

English 3 years

Physics 1 year

Trigonometry 1/2 year

Students successfully completing the above courses should be prepared to enroll in the first year of courses that count toward the engineering degree. Students without the above preparatory courses will need to take equivalent university courses before taking some of the first year of courses that count toward the engineering degree.

Programs of Study

Bachelor of Science

- BS in Electrical Engineering (p. 212)

Minor

- Minor in Electrical Engineering (p. 214)

Faculty

Matthew Kupilik, Assistant Professor, mkupilik@alaska.edu

Joe Mixsell, Professor, jcmixselljr@alaska.edu

Jens Munk, Professor/Chair, jmunk2@alaska.edu

Todd Petersen, Associate Professor, thpetersen@alaska.edu

Ahmed AbuHussein, Assistant Professor, aeabuhussein@alaska.edu

Bachelor of Science in Electrical Engineering

Admission Requirements

To be admitted to the electrical engineering major:

1. Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53) and (p. 53)
2. Complete the high school preparation courses (p. 212) with grades of C or better.

Academic Requirements

All prerequisites for engineering courses must be completed with a grade of C or higher, and all courses listed in the major requirements must be completed with a grade of C or higher. A student who is unable to earn a grade of C or higher in any course offered by the college may attempt to earn a satisfactory grade one additional time on a space-available basis. Failure to earn a grade of C or higher on the second attempt may result in removal from the program. Re-admittance requires a letter of appeal from the student requesting re-admittance with an explanation of any mitigating factors and how these factors have been addressed. Re-admittance is subject to approval by the department chair of the program.

A student who has a semester GPA below 2.00 in the major requirements will be placed on academic warning by the program. If a student on academic warning status receives a semester GPA of at least 2.00 in the major requirements, that student will be removed from academic warning status by the program. Otherwise, if a student on academic warning status receives a semester GPA below 2.00 in the major requirements, the student will be dropped from the program and must reapply in order to continue in the program.

Academic Integrity

The program requires its students to abide by the principles of academic integrity described in the Student Code of Conduct. Should suspected cases of academic misconduct occur, these cases may be submitted to the UAA Dean of Students Office, where the assistant director of student conduct reviews all allegations of academic misconduct. At the conclusion of the review, the assistant director of student conduct issues a notification of the findings and conclusions to the reporting faculty member, department chair and dean. Should a student from the program be found responsible for a case of academic misconduct by the UAA Dean of Students Office on two separate occasions, that student will be dropped from the program. Re-admittance requires a letter of appeal from the student requesting re-admittance with an explanation of any mitigating factors and how these factors have been addressed. Re-admittance is subject to approval by the department chair of the student's degree program.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86). Some courses listed as major requirements may also be used to satisfy General Education Requirements (GERs).
- Complete the major requirements below with a grade of C or higher.

Major Requirements

Code	Title	Credits
Core Courses		
CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	4
CSCE A248	Computer Organization and Assembly Language Programming	3
CSE A205	Introduction to C Programming for Engineers	3
EE A203	Fundamentals of Electrical Engineering I	4
EE/CSCE A241	Computer Hardware Concepts	4
EE A261	MATLAB for Electrical Engineers	3
EE A307	Introduction to Power Systems	3
EE/ME A308	Instrumentation and Measurement	3
EE/PHYS A314	Electromagnetics	3
EE/PHYS A324	Electromagnetics II	3
EE A324L	Electromagnetics Laboratory II	1
EE A333	Electronic Devices	4
EE A353 & A353L	Circuit Theory and Circuit Theory Lab	4
EE A354	Engineering Signal Analysis	3
EE A438	Design of Electrical Engineering Systems	3
EE A441	Integrated Circuit Design	3
EE A465	Telecommunications	3
EE/ME A471	Automatic Control	3
ENGR A151	Introduction to Engineering	1
ES A209	Statics	3
ES A210	Dynamics	3
ES A302	Engineering Data Analysis	3
ESM A450	Economic Analysis and Operations	3
MATH A251	Calculus I	4
MATH A252	Calculus II	4
MATH A253	Calculus III	4
MATH A302	Ordinary Differential Equations	3
PHIL A305	Professional Ethics	3
PHYS A211 & A211L	General Physics I and General Physics I Laboratory	4
PHYS A212 & A212L	General Physics II and General Physics II Laboratory	4
WRTG A212	Writing and the Professions	3
Advanced Mathematics Electives		
Select 3 credits from the following:		3
MATH A314	Linear Algebra	
MATH A321	Analysis of Several Variables	
MATH A371	Stochastic Processes	
MATH A407	Mathematical Statistics	

MATH A410	Introduction to Complex Analysis
MATH A422	Partial Differential Equations
MATH A423	Advanced Engineering Mathematics
MATH A426	Numerical Analysis

Advanced Engineering Electives

Complete 12 credits, including at least 6 credits of EE courses, from the following: 12

CSCE A365	Computer Networks
CSCE A445	Computer Design and Simulation
CSCE A465	Computer and Network Security
EE A407	Power Distribution
EE A417	Green Electrical Energy Systems
EE A451	Digital Signal Processing
EE A458	Antenna Theory
EE A462	Communication Systems
EE A472	Advanced Linear Systems
PHYS A303	Modern Physics

Total Credits 114

A total of 130 credits is required for the degree, of which 42 credits must be upper division.

Honors in Electrical Engineering

Undergraduate students in the program may be recognized for exceptional performance by earning departmental honors. The award will be noted on their university transcript. In order to receive departmental honors, a student must meet each of the following requirements.

1. Complete all program requirements.
2. Be an active member for at least one year of both a national and an on-campus student chapter of a professional engineering society that addresses issues relevant to the engineering profession.
3. Earn a GPA of 3.50 or above in the courses required for the major.
4. Gain approval for, complete and present a design/research project prior to applying for graduation. The project proposal, presentation and final written report must be approved by the program faculty.

Licensure and/or Certification

Graduates of the Bachelor of Science in Electrical Engineering gain four years of education credit toward obtaining a Professional Engineer license in Alaska.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Student Learning Outcomes

It is expected that graduates from the program will have:

- An ability to apply knowledge of mathematics, science and engineering.
- An ability to design and conduct experiments, as well as analyze and interpret data.
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- An ability to function on multidisciplinary teams.
- An ability to identify, formulate and solve engineering problems.
- An understanding of professional and ethical responsibility.
- An ability to communicate effectively.
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental and societal context.
- A recognition of the need for, and the ability to engage in, lifelong learning.
- A knowledge of contemporary issues.
- An ability to use the techniques, skills and modern engineering tools necessary for engineering practice.

Minor in Electrical Engineering

Students majoring in another subject who wish to minor in electrical engineering must complete the following requirements.

Code	Title	Credits
A minimum of 18 credits must be selected from:		18
EE A203	Fundamentals of Electrical Engineering I *	
EE/CSCE A241	Computer Hardware Concepts	
EE A307	Introduction to Power Systems	
EE/ME A308	Instrumentation and Measurement	
EE/PHYS A314	Electromagnetics *	
EE/PHYS A324	Electromagnetics II	
EE A324L	Electromagnetics Laboratory II *	
EE A333	Electronic Devices *	
EE A353	Circuit Theory *	
EE A407	Power Distribution	
EE A441	Integrated Circuit Design	
EE A451	Digital Signal Processing	
EE A458	Antenna Theory	
EE A462	Communication Systems	
EE A465	Telecommunications *	
EE/ME A471	Automatic Control	
Total Credits		18

* Recommended set of courses for the minor.

A total of 18 credits is required for the minor.

Geomatics

Engineering Building (ENGR), Room 330, (907) 786-5428

www.uaa.alaska.edu/geomatics (<http://www.uaa.alaska.edu/geomatics>)

The Department of Geomatics offers a two-year Associate of Applied Science in Geomatics, a four-year Bachelor of Science in Geomatics, a Minor in Geographic Information Systems (GIS) and an Undergraduate Certificate in GIS. Students seeking the baccalaureate degree may graduate in one of three emphasis areas: surveying, geospatial science or geo-developer. Students seeking continuing education for technical or professional enhancement or a concentrated area of study in GIS should consider either the Minor in GIS or the Undergraduate Certificate in GIS. The geomatics program is science-based and includes:

- Land surveying using global positioning systems and conventional techniques
- Automated mapping
- Computational analysis and adjustment
- Geodesy
- Principles of boundary law
- Geographic information systems (GIS)
- Digital photogrammetry
- Remote sensing and image analysis.
- Airborne LiDAR surveying
- High density spatial data analysis

The wide diversity in the profession creates a similar diversity of employment opportunities. The Undergraduate Certificate in GIS educates students with a broad base of concepts and theory, provides them with hands-on training in real world problems that are relevant to Alaska's environment, and allows them to explore several thematic areas in GIS applications, such as facilities management, transportation, marine environments, and natural resources.

The Minor in GIS is designed for students seeking to enhance their knowledge of GIS and remote sensing to complement a major baccalaureate degree in a variety of disciplines including science, art, business management and engineering. GIS, as a part of geospatial science and information technologies, is widely used in many industries important to Alaska (e.g., oil, gas), governance and administration (municipalities and the state), statewide and federal agencies and departments (transportation, natural resources, land management, parks and recreation, etc.), research (sustainability, biodiversity, ecology, geology, anthropology, socioeconomics, etc.), homeland security, military applications, and non-profit organizations.

The Associate of Applied Science in Geomatics prepares students for technician-level employment as land survey technicians or as automated mapping technicians. Those working as survey technicians frequently work outdoors, travel to various job locations, and enjoy an independent lifestyle. Automated mapping technicians work with the latest cartographic techniques and equipment and easily transfer skills learned in geomatics courses to other disciplines.

The Bachelor of Science prepares students for a wide variety of professional-level opportunities. Since Alaska poses unique geomatics challenges, the curriculum emphasizes northern principles and practices. UAA graduates are highly employable in the Alaska marketplace and worldwide. Employment opportunities are found in private industry, government and municipal agencies. Geomatics graduates working at the professional level enjoy responsibility and a choice of indoor and outdoor employment with many opportunities for advancement and diversification.

The new high-tech fields open employment in GIS, photogrammetry, remote sensing, land surveying, automated mapping, land design and planning, survey engineering, and resource management positions. In Alaska, geomatics professionals work on state and Native land claims, mining claims, fishing leases, petroleum reserves, forest selections, transportation corridors, private developments, and government and military projects. In Alaska and elsewhere, geomatics professionals work in land surveying, land development and design, mapping and tax assessment, the defense industry, environmental engineering assessment and management, public safety and welfare, medicine, transportation, agriculture, business, and natural sciences.

Professional predictors indicate that employment opportunities will be strong for the various geomatics specialties in Alaska and the Pacific Rim well for decades to come. While still in school, many geomatics students find part-time and summer employment with geomatics related employers.

The Department of Geomatics accommodates a wide variety of student objectives from entry level to professional preparation and encourages the nontraditional student to return for training in current practices and principles.

Students seeking professional licensing as registered land surveyors and those who are interested in specializing in surveying should enroll in the Bachelor of Science program (surveying emphasis). Students seeking certification such as a Certified Photogrammetrist (CP) or as a Geographic Information System Professional (GISP) and those who are interested in geospatial science or GIS should enroll in the Bachelor of Science program (geospatial science emphasis). Students seeking a specialization in geospatial science with a concentration in computer programming should enroll in the Bachelor of Science program (geo-developer emphasis). For the most effective planning, bachelor's degree candidates should declare their intent by the second semester of their geomatics studies.

Mission Statement

The Department of Geomatics' mission is to contribute to the wider body of knowledge in the geospatial sciences, and to disseminate this to society. By advancing our theoretical, professional, technical and educational capabilities, we will develop and maintain a community dedicated to the highest standards of scholarship. Within a student-centered environment, we are committed to the theoretical, professional and technical advancement of all our students, so that they may contribute to the advancement of their profession, their society, and their world, throughout their lives.

Programs of Study

Undergraduate Certificate

- Certificate in Geographic Information Systems (p. 216)

Associate of Applied Science

- AAS in Geomatics (p. 216)

Bachelor of Science

- BS in Geomatics (p. 217)

Minor

- Minor in Geographic Information Systems (p. 219)

Undergraduate Certificate in Geographic Information Systems (GIS)

Admission to this program is currently suspended. Contact the College of Engineering for more information.

Associate of Applied Science in Geomatics

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Preparation

Students seeking the Associate of Applied Science in Geomatics should prepare for entrance into the program by completing the following high school courses:

Category	HS Class
Mathematics	Algebra II, trigonometry
Science	Natural sciences such as chemistry, physics, biology or geology
English Composition	Skill level as demonstrated by ACT, SAT or approved placement test to qualify for enrollment in WRTG A111

The university offers courses to help students without this preparation to meet the skill level required in the geomatics program. Insufficient preparation will increase the number of semesters required to complete the degree.

Advising

All undergraduate students are encouraged to meet with their academic advisor each semester for the purpose of reviewing their academic progress and planning future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise.

Students are encouraged to consult the faculty in the Department of Geomatics for assistance in designing their course of study to ensure

that all prerequisites have been met and that university and major degree requirements are understood and followed.

Some of the program requirement courses will also fulfill the General Course Requirements (p. 83) for AAS degrees. Students should coordinate choices carefully with their academic advisor in the Department of Geomatics.

Academic Requirements

A student who is unable to earn a satisfactory grade of C or better in the program requirement courses during their initial enrollment may attempt to earn a satisfactory grade one additional time on a space-available basis. Failure to earn a grade of C or better on the second attempt may result in removal from the geomatics program.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
Complete 7 to 8 credits in natural sciences, including at least one laboratory:		7-8
ASTR A103 & A103L	Solar System Astronomy and Solar System Astronomy Laboratory	
BIOL A102 & BIOL A103	Introductory Biology and Introductory Biology Laboratory	
BIOL A178 & BIOL A179	Fundamentals of Oceanography and Fundamentals of Oceanography Laboratory	
CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	
ENVI A211 & A211L	Environmental Science: Systems and Processes and Environmental Science: Systems and Processes Laboratory	
GEOG/ENVI A111	Earth Systems: Elements of Physical Geography	
GEOL A111 & A111L	Physical Geology and Physical Geology Laboratory	
GEOL A115 & A115L	Environmental Geology and Environmental Geology Laboratory	
PHYS A123 & A123L or PHYS A211 & A211L	College Physics I and College Physics I Laboratory General Physics I and General Physics I Laboratory	

PHYS A124 & A124L or PHYS A212 & A212L	College Physics II and College Physics II Laboratory General Physics II and General Physics II Laboratory	
Complete the following:		
WRTG A212	Writing and the Professions	3
GEO A146	Geomatics Computations I	3
GEO A156	Fundamentals of Surveying	3
GEO A157	Computer-Aided Drafting for Surveyors	3
GEO A256	Engineering Surveying	3
GEO A266	Advanced Surveying	3
GEO A267	Boundary Law I	3
GIS A101	Introduction to Geographic Information Systems	3
GIS A201	Intermediate Geographic Information Systems	3
MATH A151 & MATH A152 or MATH A155	College Algebra for Calculus and Trigonometry Precalculus	5-7
Total Credits		39-42

A minimum of 60 credits is required for the degree.

Program Student Learning Outcomes

Students graduating with an Associate of Applied Science in Geomatics will be able to:

- Operate industry standard field surveying equipment,
- Keep surveying records,
- Perform basic surveying computations,
- Produce surveying drawings,
- Apply knowledge of basic boundary law in the field, and
- Utilize basic geographic information systems in an engineering context.

Bachelor of Science in Geomatics

Program Educational Objectives

Within a few years of graduation, graduates of the Bachelor of Science in Geomatics program:

- Have attempted NCEES Fundamentals of Surveying examination or other professional certification/registration, e.g. FS, PS, CP or GISP, as appropriate for their career path in a geomatics discipline
- Obtain membership in one or more professional organizations relevant to their career of choice.
- Be employed in the fields within the geomatics disciplines, including surveying of various types, mapping and cartography, GIS/LIS, remote sensing, geodesy, photogrammetry or hydrographic surveying.

- Continue their professional development by participating in professional development courses or sessions, or complete higher education courses.
- Teach at least one workshop or training session, make one conference presentation, or publish one article relevant to their career.

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Preparation

Students seeking the Bachelor of Science in Geomatics should prepare for entrance into the program by completing the following high school courses:

Category	HS Class
Mathematics	Algebra II, trigonometry
Science	Natural sciences such as chemistry, physics, biology or geology
English	Skill level as demonstrated by ACT, SAT or approved
Composition	placement test to qualify for enrollment in WRTG A111

The university offers courses to help students without this preparation to meet the skill level required in the geomatics program. Insufficient preparation will increase the number of semesters required to complete the degree.

Advising

All undergraduate students are encouraged to meet with their academic advisor each semester for the purpose of reviewing their academic progress and planning future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise.

Students are encouraged to consult the faculty in the Department of Geomatics for assistance in designing their course of study to ensure that all prerequisites have been met and that university and degree requirements are understood and followed.

Academic Requirements

A student who is unable to earn a satisfactory grade of C or better in the major requirement courses during their initial enrollment may attempt to earn a satisfactory grade one additional time on a space-available basis. Failure to earn a grade of C or better on the second attempt may result in removal from the geomatics program.

Graduation Requirements

1. Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
2. Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
3. Complete the major requirements below.

Major Requirements

Code	Title	Credits
Core Courses		
Complete 11-12 credits from the following with at least one lab:		11-12
ASTR A103 & A103L	Solar System Astronomy and Solar System Astronomy Laboratory	
BIOL A102 & BIOL A103	Introductory Biology and Introductory Biology Laboratory	
BIOL A178 & BIOL A179	Fundamentals of Oceanography and Fundamentals of Oceanography Laboratory	
CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	
ENVI A211 & A211L	Environmental Science: Systems and Processes and Environmental Science: Systems and Processes Laboratory	
GEOG/ENVI A111	Earth Systems: Elements of Physical Geography	
GEOL A111 & A111L	Physical Geology and Physical Geology Laboratory	
GEOL A115 & A115L	Environmental Geology and Environmental Geology Laboratory	
PHYS A123 & A123L	College Physics I and College Physics I Laboratory	
or PHYS A211 & A211L	General Physics I and General Physics I Laboratory	
PHYS A124 & A124L	College Physics II and College Physics II Laboratory	
or PHYS A212 & A212L	General Physics II and General Physics II Laboratory	
Complete the following courses:		
BA/JUST A241	Business Law I	3
BA A300	Organizational Theory and Behavior	3
WRTG A212	Writing and the Professions	3
ESM A450	Economic Analysis and Operations	3
GEO A146	Geomatics Computations I	3
GEO A156	Fundamentals of Surveying	3
GEO A246	Geomatics Computations II	3
GEO A267	Boundary Law I	3
GEO A357	Photogrammetry	3
GEO A359	Geodesy and Map Projections	3
GEO A364	Spatial Data Adjustments I	3
GEO A460	Geomatics Capstone Project	3
GEO A466	Geopositioning	3

GIS A101	Introduction to Geographic Information Systems	3
GIS A201	Intermediate Geographic Information Systems	3
GIS A351	Remote Sensing	3
MATH A151 & MATH A152 or MATH A155	College Algebra for Calculus and Trigonometry and Precalculus	5-7
MATH A221 or MATH A251	Applied Calculus for Managerial and Social Sciences and Calculus I	3-4
PHIL A305	Professional Ethics	3
STAT A253	Applied Statistics for the Sciences	4
Total Credits		74-78

Choose one of the following concentration areas: surveying, geospatial or developer.

Code	Title	Credits
Surveying Concentration		
GEO A157	Computer-Aided Drafting for Surveyors	3
GEO A256	Engineering Surveying	3
GEO A266	Advanced Surveying	3
GEO A366	Spatial Data Adjustments II	3
GEO A369	Cadastral Surveys	3
GEO A410	High-Density Surveying	3
GEO A457	Boundary Law II	3
PEP A112	First Aid and CPR for Professionals	1
Complete 3 credits from the following:		3
GEO A354	City and Regional Planning	
GEO A355	Land Development and Design	
GEO A420	Point Cloud Analysis	
GEO A433	Hydrographic Surveying	
GEO A490	Selected Advanced Topics in Geomatics	
GIS A301	Spatial Data Structures	
GIS A458	Spatial Data Management	
GIS A466	Spatial Analysis	
GIS A467	Image Analysis	
Total Credits		25

Code	Title	Credits
Geospatial Concentration		
GEO A410	High-Density Surveying	3
GEO A420	Point Cloud Analysis	3
GIS A301	Spatial Data Structures	3
GIS A458	Spatial Data Management	3
GIS A466	Spatial Analysis	3
GIS A467	Image Analysis	3

Complete 6 credits from the following:		6
CSCE A201	Computer Programming I	
CSCE A222	Object-Oriented Programming I	
CSCE A360	Database Systems	
GEO A157	Computer-Aided Drafting for Surveyors	
GEO A256	Engineering Surveying	
GEO A266	Advanced Surveying	
GEO A354	City and Regional Planning	
GEO A355	Land Development and Design	
GEO A366	Spatial Data Adjustments II	
GEO A433	Hydrographic Surveying	
GEO A490	Selected Advanced Topics in Geomatics	
PEP A112	First Aid and CPR for Professionals	1
Total Credits		25

Code	Title	Credits
Developer Concentration		
CSCE A201	Computer Programming I	4
CSCE A222	Object-Oriented Programming I	3
CSCE A360	Database Systems	3
GEO A420	Point Cloud Analysis	3
GIS A301	Spatial Data Structures	3
GIS A458	Spatial Data Management	3
GIS A466	Spatial Analysis	3
GIS A467	Image Analysis	3
Total Credits		25

A minimum of 120 credits is required for the degree, of which 42 must be upper-division.

Honors in Geomatics

Undergraduate students may be recognized for exceptional performance by earning departmental honors in geomatics. In order to receive honors, a student must meet each of the following requirements:

1. Complete all requirements for a BS in Geomatics.
2. Meet the UAA requirements for Graduation with Honors (<https://catalog.uaa.alaska.edu/academicpoliciesprocesses/academicstandardsregulations/graduation>)
3. Have a GPA of 3.50 or higher in their courses required for the major. Document a minimum of eight weeks work experience while a student at the University of Alaska Anchorage in a geomatics or geomatics-related position.

Licensure and/or Certification

Graduates of the Bachelor of Science in Geomatics gain four years of education credit toward obtaining a Professional Land Surveyor license in Alaska.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Student Learning Outcomes

Students graduating with a Bachelor of Science in Geomatics will have:

- An ability to apply knowledge of mathematics, statistics and general physics;
- An ability to collect, analyze and interpret data in all of the recognized surveying and mapping areas;
- An ability to identify, formulate and design a geomatics system, component or process to meet desired needs;
- An ability to function on multidisciplinary as well as on interdisciplinary teams;
- An ability to think critically and to solve geomatics problems creatively and constructively;
- An understanding of professional and ethical responsibility;
- An ability to communicate effectively;
- The broad education necessary to understand the impact of geomatics solutions in a global and societal context;
- A recognition of the need for, and ability to engage in, lifelong learning;
- A knowledge of contemporary issues in professional practice;
- An ability to use the techniques, skills and modern geomatics tools necessary for geomatics practice; and
- An ability to apply knowledge in all six areas of surveying and mapping:
 - Field surveying and methods;
 - Photogrammetric mapping, image interpretation and remote sensing;
 - Surveying calculation and data adjustment;
 - Geodetic coordinates and astronomy;
 - Cartographic representation, projections and map production;
 - Computer-based multipurpose cadastre, geographic information systems.

Minor in Geographic Information Systems (GIS)

Students majoring in another subject who wish to minor in geographic information systems must complete the following courses:

Code	Title	Credits
GIS A101	Introduction to Geographic Information Systems	3
GIS A201	Intermediate Geographic Information Systems	3
Complete 6-12 credits from the following:		6-12
GEO A490	Selected Advanced Topics in Geomatics	
GIS A301	Spatial Data Structures	

GIS A351	Remote Sensing	
GIS A370	GIS and Remote Sensing for Natural Resources	
GIS A458	Spatial Data Management	
GIS A466	Spatial Analysis	
GIS A467	Image Analysis	
Complete any remaining credits from the following:		0-6
ANTH A101	Introduction to Anthropology	
ANTH A211	Archaeology	
ANTH A480	Analytical Techniques in Archaeology and Bioanthropology	
BIOL/GEOL A178	Fundamentals of Oceanography	
BIOL/GEOL A179	Fundamentals of Oceanography Laboratory	
BIOL A473	Conservation Biology	
BIOL A482	Spatial Ecology	
ENVI A211	Environmental Science: Systems and Processes	
ENVI A211L	Environmental Science: Systems and Processes Laboratory	
GEOG/ENVI A111	Earth Systems: Elements of Physical Geography	
GEOG A375	Environmental Applications of Geographic Information Systems (GIS)	
GEOL A350	Geomorphology	
GEOL A480	Geologic Field Methods	
JUST A201	Justice Data Analysis	
SOC A462	Social Science Statistics	

A total of 18 credits is required for the minor.

Program Student Learning Outcomes

Students completing the Minor in Geographic Information Systems (GIS) will be able to:

- Supplement their major education with professional application of GIS.
- Create graphical presentations and maps using geospatial information.
- Analyze and manage geospatial data relative to your discipline or profession.

Mechanical Engineering

Engineering Building (ENGR), Room 201, (907) 786-1900
www.uaa.alaska.edu/collegeofengineering (<http://www.uaa.alaska.edu/collegeofengineering>)

The Department of Mechanical Engineering offers a Bachelor of Science in Mechanical Engineering (BS ME), and minors in general engineering and mechanical engineering. The baccalaureate program is fully accredited. Students are introduced to principles of mathematics,

chemistry and physics during the first two years of study. The third year of study largely focuses on courses that apply these basic sciences in an engineering context. During the fourth year students take more advanced courses including technical electives that are more focused on mechanical engineering analysis and design. The program focuses on the design of systems related to transfer of thermal and mechanical energies where topics such as machine design and thermal systems, including heating, ventilation, air conditioning, and refrigeration (HVAC&R), are covered in detail. Students have the opportunity for hands-on experience in a state-of-the-art manufacturing lab with rapid prototyping through three dimensional printers and computer numerical control (CNC) machining. Students also take courses on written and oral communication, humanities, social sciences and fine arts to improve their communication skills and to put their profession into a broader societal context.

Accreditation

The Bachelors of Science in computer systems engineering, electrical engineering and mechanical engineering are accredited by the Engineering Accreditation Commission of ABET (<http://www.abet.org>).

Program Objectives

1. To produce graduates who are able to practice mechanical engineering through design and analysis of mechanical systems in industry, government, and academic settings.
2. To produce graduates who are prepared for graduate-level education, research and development, and other creative endeavors in science and technology.
3. To produce graduates who are able to conduct themselves in a professional and ethical manner.
4. To produce graduates who are able to become contributors and leaders in the economic development and improving the quality of life in the State of Alaska, the nation and the world.

Preparation

While in high school, students can prepare for entering and succeeding in the university engineering program. In order to be the best prepared, students should complete the following high school courses with grades of C or better:

Algebra	2 years
Chemistry	1 year
English	3 years
Physics	1 year
Trigonometry	1/2 year

Students successfully completing the above courses should be prepared to enroll in the first year of courses that count toward the engineering degree. Students without the above preparatory courses will need to take equivalent university courses before taking some of the first year of courses that count toward the engineering degree.

Programs of Study

Bachelor of Science

- BS in Mechanical Engineering (p. 221)

Minor

- Minor in Mechanical Engineering (p. 223)

Faculty

Jennifer Brock, Associate Professor/Chair, jmcferran@alaska.edu

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Getu Hailu, Assistant Professor

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Bachelor of Science in Mechanical Engineering

Admission Requirements

In addition to the Application and Admission Requirements for Baccalaureate Programs (p. 53), complete the high school preparation courses (p. 220) (or their university equivalents) with grades of C or better.

Academic Requirements

All prerequisites for engineering courses must be completed with a grade of C or higher, and all courses listed in the major requirements must be completed with a grade of C or higher. A student who is unable to earn a grade of C or higher in a program course offered by the College of Engineering will be required to meet with a department faculty advisor to develop a plan for improvement of academic performance before continuing in the program. A student who fails to earn a grade of C or higher on the second attempt will be required to meet with an academic advisor and a member of the College of Engineering professional advising staff to develop a plan for improvement of academic performance before continuing in the program. A student who fails to earn a grade of C or higher on the third attempt will be removed from the program. Re-admittance requires a letter of appeal from the student requesting re-admittance with an explanation of any mitigating factors and how these factors have been addressed. Re-admittance is subject to approval by the faculty of the program and is communicated by the department chair.

Academic Integrity

The program requires its students to abide by the principles of academic integrity described in the Student Code of Conduct. Should suspected cases of academic misconduct occur, these cases may be submitted to the UAA Dean of Students Office, where the assistant director of student conduct reviews all allegations of academic misconduct. At the conclusion of the review, the assistant director of student conduct issues a notification of the findings and conclusions to the reporting faculty member, department chair and dean. Should a student from the

program be found responsible for a case of academic misconduct by the UAA Dean of Students Office on two separate occasions, that student will be removed from the program. Re-admittance requires a letter of appeal from the student requesting re-admittance with an explanation of any mitigating factors and how these factors have been addressed. Re-admittance is subject to approval by the faculty of the program and is communicated by the department chair.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements (GERs) for Baccalaureate Degrees (p. 86). Some courses listed as major requirements may also be used to satisfy GERs.
- Complete the major requirements below with a grade of C or higher.

Major Requirements

Code	Title	Credits
Core Courses		
CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	4
CHEM A106 & A106L	General Chemistry II and General Chemistry II Laboratory	4
WRTG A212	Writing and the Professions	3
ENGR A105A	Engineering Graphics	1
ENGR A105B	Computer-Aided Graphics	1
ENGR A151	Introduction to Engineering	1
ES A209	Statics	3
ES A210	Dynamics	3
ES A261	Introduction to Engineering Computation	3
ES A302	Engineering Data Analysis	3
ES A309	Elements of Electrical Engineering	3
ES A331	Mechanics of Materials	3
ES A341 & A341L	Fluid Mechanics and Fluid Mechanics Laboratory	4
ES A346	Introduction to Thermodynamics	3
ESM A450	Economic Analysis and Operations	3
MATH A251	Calculus I	4
MATH A252	Calculus II	4
MATH A253	Calculus III	4
MATH A302	Ordinary Differential Equations	3
ME A280	Solid Modeling for Engineers	3
ME/EE A306	Dynamics of Systems	3
ME/EE A308	Instrumentation and Measurement	3
ME A313	Mechanical Engineering Thermodynamics	3

ME A334 & A334L	Materials Science and Materials Science Laboratory	4
ME A403	Machine Design	3
ME A414 & A414L	Thermal System Design and Thermal System Design Lab	4
ME A438	Design of Mechanical Engineering Systems	3
ME A441 & A441L	Heat and Mass Transfer and Heat and Mass Transfer Lab	4
PHYS A211 & A211L	General Physics I and General Physics I Laboratory	4
PHYS A212 & A212L	General Physics II and General Physics II Laboratory	4

Advanced Mathematics Electives

Complete one of the following:		3
MATH A314	Linear Algebra	
MATH A321	Analysis of Several Variables	
MATH A371	Stochastic Processes	
MATH A407	Mathematical Statistics	
MATH A410	Introduction to Complex Analysis	
MATH A422	Partial Differential Equations	
MATH A424	Advanced Engineering Mathematics: Linear and Numerical Analysis	
MATH A425	Advanced Engineering Mathematics: Partial Differential Equations and Complex Variables	
MATH A426	Numerical Analysis	

Advanced Engineering Electives

Complete 12 credits, including at least 6 credits of ME courses, from the following:		12
ME A408 or ME A608	Mechanical Vibrations	
ME A415 or ME A615	Composite Materials	
ME A420	Automotive Engineering	
ME A421 or ME A621	Engineering Finite Element Analysis	
ME A442 or ME A642	Advanced Fluid Mechanics	
ME A451 or ME A651	Aerodynamics	
ME A453 or ME A653	Renewable Energy Systems Engineering	
ME A454	Manufacturing Design	
ME A455 or ME A655	HVAC Systems Optimization	
ME A459	Fracture Mechanics	

or ME A659	Fracture Mechanics
ME A460 or ME A660	Turbomachinery
ME/EE A471	Automatic Control
ME A630	Advanced Mechanics of Materials
ME A664	Corrosion Processes and Engineering
Total Credits	110

A total of 131 credits is required for the degree, of which 42 credits must be upper division.

Honors in Mechanical Engineering

Undergraduate students in the program may be recognized for exceptional performance by earning departmental honors. The award will be noted on their permanent university transcript. In order to receive departmental honors, a student must meet each of the following requirements.

1. Complete all program requirements.
2. Earn a GPA of 3.50 or above in the courses required for the major.
3. Gain approval for, complete and present a design/research project prior to applying for graduation. The project proposal, presentation and final written report must be approved by the program faculty.

Licensure and/or Certification

Graduates of the Bachelor of Science in Mechanical Engineering gain four years of education credit toward obtaining a Professional Engineer license in Alaska.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Student Learning Outcomes

It is expected that graduates from the program will have:

- An ability to apply knowledge of mathematics, science, and engineering.
- An ability to design and conduct experiments, as well as analyze and interpret data.
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- An ability to function on multidisciplinary teams.
- An ability to identify, formulate, and solve engineering problems.
- An understanding of professional and ethical responsibility.
- An ability to communicate effectively.
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.

- A recognition of the need for, and the ability to engage in, lifelong learning.
- A knowledge of contemporary issues.
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Minor in Mechanical Engineering

Students majoring in another subject who wish to minor in mechanical engineering must complete the following requirements.

Code	Title	Credits
A minimum of 18 credits must be selected from:		18
ES A331	Mechanics of Materials *	
ES A341	Fluid Mechanics *	
ES A341L	Fluid Mechanics Laboratory	
ES A346	Introduction to Thermodynamics *	
ME/EE A306	Dynamics of Systems *	
ME/EE A308	Instrumentation and Measurement	
ME A313	Mechanical Engineering Thermodynamics	
ME A334	Materials Science *	
ME A334L	Materials Science Laboratory	
ME A403	Machine Design	
ME A414	Thermal System Design	
ME A414L	Thermal System Design Lab	
ME A441	Heat and Mass Transfer *	
ME A441L	Heat and Mass Transfer Lab	
Total Credits		18

* Recommended set of courses

A total of 18 credits is required for the minor.

College of Health

www.uaa.alaska.edu/collegeofhealth (<http://www.uaa.alaska.edu/collegeofhealth>)

The College of Health comprises a variety of departments, including the Department of Health Sciences, the Department of Human Services, the Justice Center, the School of Nursing and the School of Social Work. The college offers certificate and undergraduate and graduate degree options for students who are attracted to people-oriented careers. It also provides a special opportunity for cross-disciplinary studies as they relate to the human aspects of our culture, and helps to prepare graduates for the increasingly integrated approaches to service delivery demanded by society.

Professional programs housed within this college share a common interest in issues that impact the development, health and well-being of individuals and communities. The instructional, service and scholarship efforts of the faculty in the various curricula are enhanced and supported by collaborative research and service activities in the Center for Alcohol and Addiction Studies (CAAS), the Center for

Human Development (CHD), the Alaska Area Health Education Center, the Justice Center, the Institute for Circumpolar Health Studies (ICHS), and the National Resource Center for American Indian, Alaska Native and Native Hawaiian Elders. Together, through multidisciplinary approaches, the schools, departments, centers and institutes take direct action to address the needs and potentials of Alaska's peoples and communities.

Center for Community Engagement and Learning

Consortium Library (LIB), Room 211N, (907) 786-4062

www.uaa.alaska.edu/engage (<http://www.uaa.alaska.edu/engage>)

The Center for Community Engagement and Learning serves the entire university and connects academic programs with community needs to use scholarship and action for the mutual benefit of the university and state, its communities, and its diverse peoples. The Center offers an Undergraduate Certificate in Civic Engagement, support for faculty members interested in community-engaged teaching and research, and provides opportunities for students who wish to pursue public issues, action research, and service projects.

Program of Study

Undergraduate Certificate

- Certificate in Civic Engagement (p. 223)

Certificate Committee Faculty

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Hilary Seitz, Professor, hjseitz@alaska.edu (cksiemers@alaska.edu)

Cheryl Siemers, Assistant Director/Associate Professor, cksiemers@alaska.edu

Tara Smith, Professor, tmsmith@alaska.edu

Undergraduate Certificate in Civic Engagement

This undergraduate certificate prepares students to become active, effective, ethical citizens in their professional and personal lives. Students develop reflective, analytic and practical skills to link their learning to civic engagement through service-learning experiences, internships, community-engaged scholarship and a capstone leadership course. This program highlights scholarly, community-based engagement in students' major coursework while facilitating connections to a broad spectrum of civic participation.

Admission Requirements

- Satisfy the Application and Admission Requirements for Undergraduate Certificate Programs (p. 53).

- Students must be enrolled in a major or pre-major baccalaureate degree program or have completed a baccalaureate degree.

Advising

All students in the Undergraduate Certificate in Civic Engagement program are required to meet with a certificate advisor to create a plan of study that is integrated with her/his major course of study. The plan of study must be approved by the Certificate Faculty Committee. Plans, and any amendments to them, must be submitted to the Certificate Faculty Committee by the student and the certificate advisor. Students are strongly encouraged to remain in contact with their certificate advisor throughout the course of their studies.

Graduation Requirements

- Satisfy the General University Requirements for Undergraduate Certificates (p. 82).
- Complete the program requirements below.
- Complete a baccalaureate degree program concurrently or before the Undergraduate Certificate in Civic Engagement.

Program Requirements

Code	Title	Credits
Plan of Study		
Written with a certificate advisor; reviewed and approved by Certificate Faculty Committee, director of Center for Community Engagement and Learning, and dean of College of Health; and submitted to Office of the Registrar.		
Core Courses *		
CEL A292	Introduction to Civic Engagement	3
CEL A392	Civic Engagement: Learning by Giving	3
CEL A395	Civic Engagement Internship	3-9
CEL A450	Civic Engagement Leadership Capstone	3
Electives **		
Up to 6 credits of lower division (100-299) electives		6
Minimum of 9 credits of upper division (300-499) electives		9
Civic Engagement Portfolio		
Evaluated for graduation by Certificate Faculty Committee.		
Total Credits		27-33

* Students may substitute another internship and/or capstone course if approved by Certificate Faculty Committee.

** Approved by Certificate Faculty Committee; community-engaged learning component required in at least 9 total elective credits; courses must help students meet certificate learning outcomes.

A minimum of 30 credits and the civic engagement portfolio are required for the certificate.

Program Student Learning Outcomes

Students who earn the Undergraduate Certificate in Civic Engagement will be able to:

- Demonstrate democratic skills, such as communication, problem-solving and negotiation, necessary for addressing public problems at multiple levels.
- Articulate public uses of their education and civic engagement.
- Synthesize civic imagination and the abilities and needs of individuals, groups and communities into a vision for the future.
- Compose personal roles and ethical standards for participation in a diverse global community.

Center for Human Development

2702 Gambell St., Suite 103, Anchorage, AK 99503, (907) 272-8270 or (800) 243-2199

www.uaa.alaska.edu/centerforhumandevlopment (<http://www.uaa.alaska.edu/centerforhumandevlopment>)

The Center for Human Development (CHD) is a University Center for Excellence in Developmental Disabilities in Education, Research and Service (UCEDD) authorized by the Developmental Disabilities Assistance and Bill of Rights Act of 2000. There are 67 UCEDDs, at least one in every state and territory, that form an Association of UCEDDs (<http://www.aucd.org>). Since CHD is the only UCEDD in Alaska, it serves the entire state.

The UAA CHD has four major functions:

1. Interdisciplinary education
2. Community training and technical assistance
3. Research
4. Information dissemination

These activities are designed to increase the independence, productivity and community integration and inclusion for individuals with disabilities. CHD's projects and activities are not limited to developmental disabilities; they focus on a wide range of disabilities, ages and issues.

Program of Study

Occupational Endorsement Certificate

- OEC in Children's Behavioral Health (p. 224)

Faculty

Ken Hamrick, Instructor, kehamrick@alaska.edu / kenh@alaskachd.org

Occupational Endorsement Certificate in Children's Behavioral Health

The Occupational Endorsement Certificate in Children's Behavioral Health is a 12-credit occupational endorsement for paraprofessionals

who are currently working with or planning to work with children and youth in therapeutic residential settings. By completing the endorsement certificate requirements, students gain skills essential to becoming effective members of therapeutic treatment teams. All classes in the Occupational Endorsement Certificate in Children's Behavioral Health have been cross-listed with the UAA Human Services program and will be counted as selective credits for students enrolled in the HUMS undergraduate degree programs.

Admission Requirements

Satisfy the Application and Admission Requirements for Occupational Endorsement Certificate Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Occupational Endorsement Certificates (p. 82).
- Complete the program requirements below.
- Students must complete all courses with a grade of C or better. Students who audit a Disability and Long Term Supports (DLS) course or who are unable to earn a grade of C or better in the course may repeat it following the procedures outlined in the Academic Standards and Regulations (p. 30).

Program Requirements

Code	Title	Credits
DLS/HUMS A200	Introduction to Children's Behavioral Health	3
DLS/HUMS A205	Teaching Social Skills to Youth in Children's Behavioral Health	3
DLS/HUMS A206	Positive Behavioral Supports in Children's Behavioral Health	3
DLS/HUMS A385	Working with Traumatized Children	3
Total Credits		12

A total of 12 credits is required for the OEC.

Program Student Learning Outcomes

Students who successfully complete this program will be able to:

- Use knowledge of therapeutic techniques, child development and cultural responsiveness to interpret treatment plans in therapeutic settings for children and youth.
- Apply an array of strategies to support and shape behavior of children and youth with challenging behaviors.
- Abide by professional practices accepted in the field of children's behavioral health.
- Blend concepts and skills to develop trauma-informed practices in children's behavioral health services.

Dental Assisting

Allied Health Sciences Building (AHS), Room 148, (907) 786-6933
www.uaa.alaska.edu/alliedhealth/academics/dentalassisting

The dental assisting program, as part of the Allied Health Sciences Department, prepares students to become skilled members of the dental health care team. Assistants greatly increase the efficiency of the dentist in the delivery of oral health care and are valuable members of the dental care team.

The duties of the dental assistant are among the most comprehensive and varied in the dental office. The dental assistant performs a wide range of tasks requiring both interpersonal and technical skills. Some specific tasks dental assistants may perform include assisting the dentist during a variety of procedures, providing oral health care, exposing and processing radiographs (X-rays), recording the patient's medical history and vital signs, preparing and sterilizing the proper instruments and equipment for the dentist's use, providing the patient with post-operative instructions, taking impressions for study casts, performing office management tasks, and performing basic dental laboratory tasks.

Many types of practice settings are available to dental assistants. An assistant may choose to work in a private practice or a group practice. In addition, an assistant can work in a general dentistry or specialty practice, such as oral and maxillofacial surgery, orthodontics, endodontics, periodontics, prosthodontics or pediatric dentistry. Job opportunities also exist in public health facilities, federal government facilities, hospitals, dental school clinics, insurance companies, and vocational schools or community colleges and universities teaching others to become dental assistants.

The dental assisting program offers an undergraduate certificate and an Associate of Applied Science degree.

The program is accredited by the Commission on Dental Accreditation of the American Dental Association, a specialized accrediting body recognized by the Council on Postsecondary Accreditation and by the United States Department of Education. As a result of this, graduates are eligible to take the Dental Assisting National Board examination and upon successful completion will become certified dental assistants.

Programs of Study

Undergraduate Certificate

- Certificate in Dental Assisting (p. 225)

Associate of Applied Science

- AAS in Dental Assisting (p. 226)

Faculty

Cindy Armstrong, Term Instructor, clarmstrong@alaska.edu
Stephanie Olson, Professor, smolson@alaska.edu

Undergraduate Certificate in Dental Assisting

Admission Requirements

Satisfy the Application and Admission Requirements for Undergraduate Certificate Programs (p. 53).

Special admission requirements apply. Interested individuals must contact an advisor in Dental Assisting to review procedures and requirements for admission.

- Complete a dental assisting application form and mail to:

*UAA Dental Assisting Program
Allied Health Sciences Building, Room 148
3211 Providence Drive
Anchorage, AK 99508-8371*

- Complete UAA-approved English and mathematics placement tests. Contact Testing Center at (907) 786-4500 for testing times. If test scores are low, additional coursework will be recommended to help the applicant achieve the goal of completing the Dental Assisting program.
- Two letters of recommendation sent to the Dental Assisting program (on the required forms) are mandatory. Preferably these letters should come from former or current employers or instructors.

The information listed above must be in the applicant's file before they will be considered for admission in the program in the fall semester of the year applying.

Applicants with complete files are selected for admission based upon their test scores, grades in high school and college, ability to complete the application process, and dental assisting experience. If test results are low, applicants will be advised to take courses to improve reading comprehension levels; proof of successful course completion must be provided prior to acceptance into the program.

Expenses beyond tuition include activity fees, uniforms, lab fees, student organization membership, immunizations, cost of cardiopulmonary resuscitation (CPR) class, Dental Assisting National Board Exam (DANB) fees, and student health insurance.

Immunizations and CPR certification are required prior to clinical participation and must be current throughout the program. Students must be free of tooth decay and active periodontal disease.

Graduation Requirements

- Satisfy the General University Requirements for Undergraduate Certificates (p. 82).
- Complete the Program Requirements below.

Program Requirements

Code	Title	Credits
Fall Semester		
DA A101	Essentials of Dentistry	3
DA A102	Infection Control in Dentistry	3
DA A110	Dental Radiography	3
DA A110L	Dental Radiography Laboratory	1
DA A127	Dental Office Administration	3
DA A130	Chairside Techniques I	4
Spring Semester		

DA A150	Biomedical and Dental Sciences for Dental Assistants	3
DA A160	Materials in Dentistry	3
DA A195A	Clinical Practicum I	1
DA A201	Chairside Techniques II	4
DA A202	Dental Specialties for Dental Auxiliaries	3
Summer Semester		
DA A295A	Clinical Practicum II	3
Total Credits		34

A total of 34 credits is required for the certificate.

Licensure and/or Certification Information

Graduates of the Undergraduate Certificate in Dental Assisting are eligible to sit for the Certified Dental Assistant national certification examination from the Dental Assisting National Board.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Student Learning Outcomes

Students graduating with an Undergraduate Certificate in Dental Assisting will be able to:

- Demonstrate skills and knowledge necessary to be competent in the dental assisting field.
- Demonstrate professional standards according to OSHA, ADA, OSAP, ADAA and radiation health and safety standards.
- Demonstrate ethical behavior in a dental office setting.

Associate of Applied Science in Dental Assisting

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Special admission requirements apply. Interested individuals must contact an advisor in the Dental Assisting Department to review procedures and requirements for admission.

- Complete a dental assisting application form and mail to:

*UAA Dental Assisting Program
Allied Health Sciences Building, Room 148
3211 Providence Drive
Anchorage, AK 99508-8371*

- Complete UAA-approved English and mathematics placement tests. Contact Testing Center at (907) 786-4500 for testing times. If test scores are low, additional coursework will be recommended to help

the applicant achieve the goal of completing the Dental Assisting program.

- Two letters of recommendation sent to the dental assisting program (on the required forms) are mandatory. Preferably these letters should come from former or current employers or instructors.

The information listed above must be in the applicant's file before they will be considered for admission in the program in the fall semester of the year applying.

Applicants with complete files are selected for admission based upon their test scores, grades in high school and college, ability to complete the application process, and dental assisting experience. If test results are low, applicants will be advised to take courses to improve reading comprehension levels; proof of successful course completion must be provided prior to acceptance into the program.

Expenses beyond tuition include activity fees, uniforms, lab fees, student organization membership, immunizations, cost of cardiopulmonary resuscitation (CPR) class, Dental Assisting National Board Exam (DANB) fees, and student health insurance.

Immunizations and CPR certification are required prior to clinical participation and must be current throughout the program. Students must be free of tooth decay and active periodontal disease.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83) (15 credits). Completion of BIOL and PSY courses below will fulfill the requirement of 6 credits of humanities, mathematics and natural sciences, or social sciences.
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
DA A101	Essentials of Dentistry	3
DA A102	Infection Control in Dentistry	3
DA A110	Dental Radiography	3
DA A110L	Dental Radiography Laboratory	1
DA A127	Dental Office Administration	3
DA A130	Chairside Techniques I	4
DA A150	Biomedical and Dental Sciences for Dental Assistants	3
DA A160	Materials in Dentistry	3
DA A195A	Clinical Practicum I	1
DA A201	Chairside Techniques II	4
DA A202	Dental Specialties for Dental Auxiliaries	3
DA A295A	Clinical Practicum II	3
Biology Courses		4

BIOL A102 & BIOL A103	Introductory Biology and Introductory Biology Laboratory	
BIOL A111	Human Anatomy and Physiology I	
Nutrition Courses		3
CA A119	Principles of Nutrition	
DN A203	Nutrition for Health Sciences	
Psychology Courses		3
PSY A111	Introduction to Psychology	
PSY A150	Lifespan Development	
PSY A153	Human Relations	
Electives		7
Recommended courses include:		
CIS A105	Introduction to Personal Computers and Application Software	
MA A101	Medical Terminology	
General Education Requirements (GERs) for Baccalaureate Degrees		

A total of 60 credits is required for the degree.

Licensure and/or Certification

Graduates of the Associate in Applied Science in Dental Assisting are eligible to sit for the Certified Dental Assistant national certification examination from the Dental Assisting National Board.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Student Learning Outcomes

Students graduating with an Associate of Applied Science in Dental Assisting will be able to:

- Demonstrate skills and knowledge necessary to be competent in the dental assisting field.
- Demonstrate professional standards according to OSHA, ADA, OSAP, ADAA and radiation health and safety standards.
- Demonstrate ethical behavior in a dental office setting.
- Demonstrate general knowledge in the fields of biology, communications and nutrition.

Dental Hygiene

Allied Health Sciences Building (AHS), Room 148, (907) 786-4346

<http://www.uaa.alaska.edu/dentalhygiene>

The registered dental hygienist is a licensed oral health educator and clinical operator who, as part of the dental team, uses preventive, educational and therapeutic methods to help individuals and groups attain and maintain optimum oral health. Dental hygienists can work as clinicians, educators, researchers, administrators, managers, preventive

program developers, consumer advocates, sales and marketing managers, editors, and consultants. Clinical dental hygienists may work in a variety of health care settings such as private dental offices, schools, public health clinics, hospitals, managed care organizations, correctional institutions or nursing homes.

Clinical dental hygiene requires the ability to sit for long periods of time, good to excellent eye-hand coordination and excellent fine hand motor skills. Dental hygienists are exposed to bacteria and viruses. Use of protective glasses, face masks and surgical-type gloves is required. A professional appearance must be maintained during preclinical and clinical sessions.

The Associate of Applied Science (AAS) in Dental Hygiene program suspended admissions effective spring 2018. The Dental Hygiene AAS program is accredited by the Commission on Dental Accreditation of the American Dental Association (CODA), a specialized accrediting body recognized by the Council on Postsecondary Accreditation and by the United States Department of Education. The CODA accreditation will continue for the AAS degree until all current full majors have completed their requirements. Our accreditation status will apply to the Bachelor of Science in Dental Hygiene (BSDH) program, when it becomes our entry-level program, beginning with the 2019 cohort that will be selected in fall 2018.

Students in the entry-level BSDH will be selected in the fall semester and will start classes in January. Once enrolled in the BSDH program, the student can anticipate a five-semester, 40-hour-per-week schedule that includes course activities outside normal class times. Evening classes and clinics may be scheduled. The program prepares graduates clinically and academically to take the National and Western Regional Examining Boards (WREB) for licensure.

The BSDH program also offers hygienists training in restorative dental hygiene and/or educational methodology. Students earning a BSDH may be eligible for a commission in the U.S. Public Health Service and for teaching opportunities. The BSDH prepares students for graduate programs in dental hygiene and public health.

Transfer of credits may be possible for graduates of an American Dental Association (ADA) accredited dental assisting program. Contact the dental hygiene program advisor for details.

Expenses beyond tuition include activity fees, instruments, uniforms, lab fees, student organization membership, graduation pin, immunizations, cardiopulmonary resuscitation (CPR) class, board exam fees, licensure fees, student health insurance and malpractice insurance for the Western Regional Examining Boards and professional liability insurance. Please refer to the dental hygiene program website for expense estimates.

Special Considerations

Due to the nature of the work, dental hygiene students are not permitted to work in the classroom, laboratory or clinic when under the influence of intoxicants, drugs or medication affecting psychomotor responses. Guidelines for Infection Control in Dental-Health Care Settings from the Centers for Disease Control and Prevention will be followed for students with, or exposed to, infectious diseases. As a condition of

participation in the dental hygiene program students must abide by the university's Student Code of Conduct, the dental hygiene program's policies and procedures, and the American Dental Hygienists' Association Code of Ethics for Dental Hygienists.

Application for obtaining an Alaska dental hygiene license requires a background check and disclosure of information concerning illegal activity, crimes, hospitalization history regarding emotional or mental illness, drug addiction, alcoholism and contagious diseases. If a student has a history with any of the aforementioned, it is highly recommended the applicant contact the Alaska Department of Occupational Licensing or a similar government agency in any state in which the applicant wants to practice. Employability may be affected by results of background checks and/or drug testing. The UAA dental program application requires information concerning disciplinary actions taken at any university or college.

Preclinical and Clinical Requirements

Once admitted to the dental hygiene program, students are required to provide the following:

1. A signed form indicating the understanding and acceptance of the dental hygiene program policies regarding clinical safety protocol and immunizations.
2. Current Health Care Provider (American Heart Association) or Professional Rescuer (American Red Cross) certification in CPR/AED for infants, children and adults. First-year students must present proof of certification by the first day of class. Certification must be kept current until graduation.
3. Professional liability insurance that must be maintained throughout the duration of the student's enrollment in dental hygiene courses. Specific information regarding acceptable professional liability insurance policies may be obtained directly from the program.

Students enrolled in the dental hygiene program must provide their own transportation to all off-campus assignments. The program assumes no responsibility for illnesses and injuries experienced by the student while enrolled in the dental hygiene program. Students are responsible for all costs incurred due to illness or injury experienced by the student while enrolled in the dental hygiene program. It is required that students maintain personal medical insurance while enrolled in the program.

Students are responsible for providing their own patients to satisfy clinical requirements.

Programs of Study

Associate of Applied Science

- AAS in Dental Hygiene (p. 229)

Bachelor of Science

- BS in Dental Hygiene (p. 229)

Faculty

Sandra Pence, Professor, pence@alaska.edu

Carri Shamburger, Assistant Professor, cashamburger@alaska.edu

Associate of Applied Science in Dental Hygiene

Admission to the AAS in Dental Hygiene Program has been suspended. Students interested in majoring in dental hygiene are referred to the Bachelor of Science in Dental Hygiene program.

Bachelor of Science in Dental Hygiene

The Bachelor of Science in Dental Hygiene program prepares students to become registered dental hygienists. Our program serves as both an entry-level program with a competitive selection process and also as a degree completion program that allows graduates from the UAA and UAF AAS Dental Hygiene programs the opportunity to increase their education to the baccalaureate level. Admission as a degree-completion student does not require a competitive selection process. The program offers students entry-level skills in dental hygiene as well as a broader background in community oral health and additional training in other areas of dental hygiene practice tailored to the students' interests.

Admission Requirements

1. Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).
2. Special admission requirements and application procedures are required. Completion of the admission requirements does not guarantee acceptance into the Dental Hygiene program as a full major. Applicants must contact the department for the selection criteria for the year in which they wish to apply.
3. Applicants must meet with the UAA Dental Hygiene program advisor regarding application and program admission requirements prior to application deadline.
4. Successful completion of the following courses with a minimum grade of C must be documented on UAA transcript by the application deadline. Send official transcripts from non-University of Alaska institutions to UAA's Office of the Registrar (<https://www.uaa.alaska.edu/students/registrar/transfer-evaluation/index.cshhtml>) for evaluation.

Code	Title	Credits
BIOL A111	Human Anatomy and Physiology I	4
BIOL A112	Human Anatomy and Physiology II	4
BIOL A240	Introductory Microbiology for Health Sciences	4
CHEM A103 or CHEM A105	Introduction to General Chemistry General Chemistry I	3
CHEM A103L	Introduction to General Chemistry Laboratory	1
CHEM A104	Introduction to Organic and Biochemistry	3
CHEM A104L	Introduction to Organic and Biochemistry Laboratory	1

COMM A111	Fundamentals of Oral Communication	3
or COMM A235 or COMM A237 or COMM A241	Small Group Communication Interpersonal Communication Public Speaking	
WRTG A111	Writing Across Contexts	3
PSY A111 or PSY A150 or HS A220	Introduction to Psychology Lifespan Development Core Concepts in the Health Sciences	3
SOC A101 or SOC A201	Introduction to Sociology Social Problems and Solutions	3

Application Procedure

To be considered for selection into the Bachelor of Science in Dental Hygiene (BSDH) program, the application process must be completed by the deadline date posted on the program's website.

1. Provide proof of admittance into the University of Alaska Anchorage as a BSDH pre-major student.
2. Complete the BSDH Dental Hygiene program application and submit to the address below.
3. Submit official transcripts (non-UAA) to UAA's Office of the Registrar. Prerequisite coursework listed under Admission Requirements must be reflected on the UAA transcript by the application deadline.
4. Provide three letters of recommendation to the Dental Hygiene program on the required forms.
5. Submit current Test of Essential Academic Skills (TEAS) scores to the UAA Dental Hygiene program no later than the application deadline posted on the program's website. Contact the UAA Testing Center for information about TEAS administration.
6. Meet with a designated advisor for the mandatory pre-major advising session.

For information and applications, contact:

UAA Dental Hygiene Program
Allied Health Sciences Building, Room 148
3211 Providence Drive
Anchorage, AK 99508-8371
(907) 786-6929

Advising

Students should contact the Dental Hygiene program advisor for details on the application process and requirements. Students are encouraged to meet with an academic advisor each semester to review their academic progress and plan future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).

- Complete the General Education Requirements for Baccalaureate Degrees (p. 86). WRTG A212 is highly recommended to fulfill the written communication requirement.
- Complete the Major Requirements below. Earning a 75% or higher grade in each Dental Hygiene course is required to progress within the program and graduate.

Major Requirements

Code	Title	Credits
Complete the following courses with a minimum grade of C:		
DA A110	Dental Radiography	3
DA A110L	Dental Radiography Laboratory	1
DA A160	Materials in Dentistry	3
DH A201	Oral Histology and Embryology	2
DH A202	Basic Techniques for Dental Hygienists	7
DH A204	Anatomy of the Orofacial Structures	2
DH A222	Adjunctive Techniques for Dental Hygienists	3
DH A292D	Clinical Seminar I	1
DH A295D	Clinical Practicum I	4
DH A302	Advanced Instrumentation for Dental Hygienists	1
DH A310	Oral Pain Control	3
DH A311	Periodontics	2
DH A314	Pathology of Oral Tissues	2
DH A316	Professional Dental Hygiene Practice	1.5
DH A321	Current Periodontal Therapies	2
DH A324	Community Dental Health I	2
DH A365	Pharmacology for Dental Hygienists	2
DH A392C	Clinical Seminar II	1
DH A392D	Clinical Seminar III	1
DH A395C	Clinical Practicum II	5
DH A395D	Clinical Practicum III	6
DN A203	Nutrition for Health Sciences	3
STAT A200 or STAT A253	Elementary Statistics Applied Statistics for the Sciences	3-4

Selectives

Complete a minimum of 10 credits with a minimum grade of C from the following: *		10
DH A360	Restorative Techniques for Dental Auxiliaries	
DH A390	Selected Topics in Dental Hygiene **	
DH A395E	Community Practicum in Dental Hygiene ***	
DH A395R	Supplemental Dental Hygiene Clinical Practicum	

DH A398	Individual Research
DH A460	Instructional Concepts in Dental Hygiene
DH A495B	Instructional Practicum in Dental Hygiene
DH A495E	Rural Practicum in Dental Hygiene ***
DN A315	World Food Patterns
DN A355	Weight Management and Eating Disorders
DN A407	Preventive and Therapeutic Nutrition
ENGL A312 or ENGL A313 or ENGL A414	Advanced Technical Writing Professional Writing Research Writing
HS/SOC A370	Medical Sociology
PHIL A302 or PHIL A305	Biomedical Ethics Professional Ethics
Other courses approved by a Dental Hygiene advisor	

Integrative Capstone

DH A424	Community Dental Health II	3

Electives

Complete 10 elective credits	10

* Courses applied toward a minor in another discipline cannot be counted toward this requirement.

** No more than 6 credits of DH A390 may be applied toward this degree.

*** No more than 3 credits total of DH A395E, DH A395R and DH A495E can be counted toward this requirement.

A total of 120 credits is required for the degree.

Licensure and/or Certification

Graduates of the Bachelor of Science in Dental Hygiene are eligible to sit for the National Board Dental Hygiene Examination from the Joint Commission on National Dental Examinations.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Student Learning Outcomes

Students graduating with a Bachelor of Science in Dental Hygiene will be able to:

1. Provide and document dental hygiene care in a legal and ethical manner.
2. Exhibit professional behavior, including time management, risk management, and respect of patients and co-workers.
3. Critically evaluate scientific literature and research relevant to dental hygiene.

4. Collect, analyze, and record data on the general and oral health status of patients.
5. Use critical decision making skills to develop a dental hygiene diagnosis, which will provide a basis for interventions that are within the scope of dental hygiene practice and determine the need for referral to appropriate health professions as needed.
6. Formulate a dental hygiene care plan, including a planned sequence of educational, preventive, and therapeutic services based on the dental hygiene diagnosis in collaboration with the patient and other health care providers.
7. Deliver preventive and therapeutic care to achieve and maintain oral health utilizing established infection control procedures, pain control measures, and ergonomic practices.
8. Evaluate the effectiveness of the implemented services, and modify as needed.
9. Promote the profession of dental hygiene through service and affiliations with professional organizations.
10. Assess, plan, implement, and evaluate complex community oral health projects to diverse populations

Diagnostic Medical Sonography

Allied Health Science Building (AHS), Room 148, (907) 786-6936
www.uaa.alaska.edu/academics/college-of-health/departments/school-of-allied-health/academics/diagnostic-medical-sonography
 (https://www.uaa.alaska.edu/academics/college-of-health/departments/school-of-allied-health/academics/diagnostic-medical-sonography/index.cshtml)

Diagnostic medical sonographers typically work in a variety of medical settings under the supervision of a radiologist or attending physician. Diagnostic medical sonographers use special equipment to direct high-frequency sound waves into areas of the patient's body to form images that are interpreted by a physician for diagnosis. Diagnostic medical sonography requires the ability to sit or stand for long periods of time, employ excellent eye-hand coordination, communicate effectively, perform clinical assessments, use cognitive skills to adapt procedures as appropriate, use independent judgment to differentiate between normal and abnormal sonographic findings, record sonographic data, and communicate findings to the appropriate physician. Examples of examinations performed by sonographers include: abdominal, gynecological, fetal, breast, vascular, small part and superficial.

Program of Study

Associate of Applied Science

- AAS in Diagnostic Medical Sonography (p. 231)

Faculty

Ryan Parnell, Term Assistant Professor, rparnell@alaska.edu

Lita Preston, Term Assistant Professor, lapreston@alaska.edu

Associate of Applied Science in Diagnostic Medical Sonography

The Diagnostic Medical Sonography AAS program is designed for individuals who already have training and experience in a profession that provides direct care or treatment to people. This program prepares competent entry-level general sonographers in the cognitive (knowledge), psychomotor (skills) and affective (behavior) learning domains. Examples of examinations performed by sonographers include abdominal, gynecological, fetal, breast, vascular, small part and superficial structures. Graduates are prepared to sit for a national certification exam in diagnostic medical sonography.

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Students may be admitted to UAA Diagnostic Medical Sonography program as a pre-major.

Prior to being admitted as a full major, the student must meet special admission and application requirements and be selected for entry into the program. Student must:

- Show, from official transcripts, successful completion of the following courses with a minimum grade of C:

Code	Title	Credits
WRTG A111	Writing Across Contexts	3
WRTG A212 or WRTG A213	Writing and the Professions Writing and the Sciences	3
Complete 3 credits from the Oral Communication Skills GER list.		3
BIOL A111	Human Anatomy and Physiology I	4
BIOL A112	Human Anatomy and Physiology II	4
MA A101	Medical Terminology	3
MA A104	Essentials of Human Disease	3
MATH A105	Intermediate Algebra (or higher)	3
PHYS A123 or RADT A151	College Physics I Radiographic Physics	2-3

- Submit a Diagnostic Medical Sonography program application.

Applicants must contact the department for the application requirements, selection criteria and application procedure for the year they wish to apply since it is subject to change periodically. Completion of the admission requirements does not guarantee selection into the program.

Advising

Students will be required to physically attend classes at the Anchorage campus for the first year full major status and may be assigned to clinical sites in other Alaska communities at their expense during the second year. Due to the risks associated with working in a health care

setting, students may be required to provide proof of health insurance prior to starting clinical training.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the Program Requirements below with a minimum grade of C or P.

Program Requirements

Code	Title	Credits
DMS A101	Introduction to Sonography	2
DMS A103	Patient Care in Sonography	2
DMS A105	Principles and Instrumentation I	3
DMS A107	Abdominal Sonography I	2
DMS A109	OB and Gyn Sonography I	3
DMS A205	Principles and Instrumentation II	3
DMS A207	Abdominal Sonography II	2
DMS A209	OB and Gyn Sonography II	2
DMS A211	Small Parts Sonography	1
DMS A213	Vascular Technology	2
DMS A215	Breast Sonography	1
DMS A217	Fundamentals of Sonography Lab	1
DMS A219	Practical Sonography Lab	3
DMS A221	Pediatric Sonography	1
DMS A295A	Clinical Practicum I	9
DMS A295B	Clinical Practicum II	9
DMS A392	Pathophysiology Seminar	3
DMS A395	Clinical Practicum III	3
RADT A231	Sectional Anatomy for Diagnostic Imaging	3

A total of 70 credits is required for the degree.

Licensure and/or Certification

Graduates of the Associate of Applied Science in Diagnostic Medical Sonography are eligible to sit for the national certification examinations from the American Registry of Radiologic Technologists and the American Registry for Diagnostic Medical Sonography.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Student Learning Outcomes

At the completion of the Diagnostic Medical Sonography program, students are able to:

1. Apply entry-level knowledge of physics, anatomy, physiology and pathophysiology related to sonography.

2. Perform general sonography with continuing competency.
3. Demonstrate proficiency in patient assessment and care activities related to sonography.
4. Utilize effective oral and written communication with patients, physicians and other medical personnel.
5. Employ professional and ethical judgment in the performance of sonographic duties.

Dietetics and Nutrition

Professional Studies Building (PSB), Room 146, (907) 786-1276
www.uaa.alaska.edu/alliedhealth/academics/dieteticsandnutrition

The Dietetics and Nutrition Program seeks to meet the growing needs of the dietetics and nutrition industry by training entry-level registered dietitians and community nutrition and nutrition science professionals. Four undergraduate academic areas of study are offered including a Bachelor of Science in Dietetics, Bachelor of Science in Nutrition with Community Nutrition emphasis, Bachelor of Science in Nutrition with Nutrition Science emphasis and a minor in Nutrition.

Dietetics and Nutrition also offers a Graduate Certificate in Dietetic Internship (p. 400). Please see Graduate Programs (p. 345) for more information.

Bachelor of Science in Dietetics

The Bachelor of Science in Dietetics provides the first step to meeting the eligibility requirements to take the national Registered Dietitian Nutritionist (RDN) exam. RDNs are health care professionals who provide medical nutrition therapy and consultative service in health care and wellness settings. In order to complete the eligibility requirements for the RDN exam, students must complete the coursework for a bachelor's degree in a program accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) in addition to completing a 1200-hour ACEND-accredited dietetic internship.

Bachelor of Science in Nutrition

- The Community Nutrition Emphasis is for students who are interested in non-Registered Dietitian Nutritionist (RDN) required jobs in public health, health promotion and wellness settings, including the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). Graduates of this degree track will work cooperatively with other professionals, and are often supervised by RDNs, to improve the health and well-being of individuals and communities.
- The Nutrition Science Emphasis is for students who are interested in advanced study in nutrition (i.e. graduate school) to prepare for a career in nutrition research or for students interested in applying to medical school who would like a strong foundation in nutrition.

Nutrition Minor

The Nutrition Minor allows those students pursuing degrees other than Nutrition or Dietetics the opportunity to minor in Nutrition.

Programs of Study

Bachelor of Science

- BS in Dietetics (p. 233)
- BS in Nutrition (p. 234)

Minor

- Minor in Nutrition (p. 235)

Faculty

Carrie King, Associate Professor, cdking@alaska.edu

Kendra Sticka, Associate Professor, kdsticka@alaska.edu

Amanda Walch, Term Assistant Professor, akwalch@alaska.edu

Bachelor of Science in Dietetics

The Bachelor of Science in Dietetics provides individuals the didactic requirements needed to complete a Dietetic Internship and then be eligible to take the Registered Dietitian Nutritionist (RDN) exam. The Bachelor of Science in Dietetics mission statement is to guide the future of dietetics in Alaska by preparing students for supervised practice. To be successful in their field, RDNs need a strong science foundation along with courses in management, clinical and community nutrition, food science, communication, counseling, therapeutic nutrition, and nutrition for the lifespan. This degree has been designed in accordance with the accreditation standards from the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics. There is a competitive application process for admissions to the Bachelor of Science in Dietetics. Please contact the Dietetics and Nutrition Program for application information.

The Dietetics and Nutrition (DN) course requirements are online courses to facilitate access to the BS in Dietetics degree statewide. Some courses require students to complete practicums with RDNs in their communities. If practicums are located in health care settings, fingerprinting and criminal background checks will be required and paid for by the student.

Expenses beyond tuition generally include, but are not limited to, activity fees, lab fees, student organization membership, immunizations, fingerprinting and criminal background checks for practicums, cost of Serv Safe certification and food/supplies for some DN courses.

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Students who apply to the baccalaureate dietetics program are admitted first as dietetics pre-majors.

Admission as a pre-major does not guarantee admission to the dietetics program. There is limited capacity in the program. Students may apply for admission to the full dietetics major (didactic program in dietetics, or DPD) in the spring semester in which they are completing the final prerequisites for the full major (see No. 4 below). The application deadline for the DPD is February 15. The application form and full requirements can be found on the UAA dietetics program website.

Applicants transferring credit from another institution should apply to UAA no later than November 1 prior to spring application to the dietetics program to allow sufficient time for application processing and transcript evaluation. Spring enrollment in another institution may postpone transcript evaluation and therefore affect program acceptance.

The requirements for application to the full dietetics major are:

1. Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).
2. Schedule an advising session with a dietetics and nutrition program advisor regarding application and program admission requirements prior to application. For an advising appointment, call 786-1276.
3. Submit a DPD admissions application (found on the dietetics program website).
4. Complete the following courses with a minimum grade of C and an overall GPA of 3.00*. BIOL, CHEM and DN courses (or a higher level course in similar subject matter as approved by the DPD director) must have been completed within the past 10 years:

Code	Title	Credits
BIOL A111	Human Anatomy and Physiology I	4
BIOL A112	Human Anatomy and Physiology II	4
BIOL A240	Introductory Microbiology for Health Sciences	4
CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	4
CHEM A106 & A106L	General Chemistry II and General Chemistry II Laboratory	4
DN A100	The Profession of Dietetics	1
DN A203	Nutrition for Health Sciences	3
MATH A151	College Algebra for Calculus (or higher level math course)	4
Humanities GER (language is recommended)		6
Oral Communication Skills GER		3
PSY A111	Introduction to Psychology	3
or SOC A101	Introduction to Sociology	
Written Communication Skills GER		6
At least 6 additional credits of required Dietetics and Nutrition (DN) coursework in residence at UAA (see Major Requirements).		6

* *Conditional acceptance to the program can be granted if the students are in the process of taking any of the prerequisite courses during the spring semester. Students will need to provide official proof of course completion with a minimum grade of C prior to starting the program.*

Advising

1. Call the dietetics and nutrition program at (907) 786-1276 for an appointment with a dietetics and nutrition program advisor to plan a personal program of study.

2. Contact Testing Center (786-4500) to take a UAA-approved placement test of mathematics, reading and writing skills. Place a copy of the results in the department portfolio. SAT, ACT and other post-secondary transcripts may also be submitted to the department. These records will be used for advising only.
3. All students in the BS in Dietetics program (including pre-majors) are required to participate in a dietetics advising session a minimum of one time per year.

Academic Requirements

In order to progress within the DPD, students must earn a grade of C or higher in each required course and maintain a GPA of 3.00 or higher in all required courses.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the major requirements listed below.
- Meet the following GPA requirements:
 - A minimum overall GPA of 3.00 in major requirements.
 - A grade of C or higher in all courses that count toward the major.
 - A minimum cumulative GPA of 2.50.

Major Requirements

Code	Title	Credits
Support Courses *		
BA A151	Business Foundations	3
BIOL A111	Human Anatomy and Physiology I	4
BIOL A112	Human Anatomy and Physiology II	4
BIOL A108	Principles and Methods in Biology	6
CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	4
CHEM A106 & A106L	General Chemistry II and General Chemistry II Laboratory	4
MATH A151	College Algebra for Calculus (or any course for which MATH A151 is a prerequisite)	4
Fine Arts GER		3
Humanities GERs (language recommended)		6
Oral Communication Skills GER		3
PSY A111 or SOC A101	Introduction to Psychology or Introduction to Sociology	3
STAT A200	Elementary Statistics	3
WRTG A111 or WRTG A1W	Writing Across Contexts or Written Communication Skills GER	3
WRTG A212	Writing and the Professions	3

or WRTG A213	Writing and the Sciences	
Core Courses		
BIOL A240	Introductory Microbiology for Health Sciences	4
CHEM A321	Organic Chemistry I	3
CHEM A441	Principles of Biochemistry I *	3
DN A100	The Profession of Dietetics	1
DN A151	Nutrition Through the Life Cycle	3
DN A203	Nutrition for Health Sciences	3
DN A255	Concepts of Healthy Food	3
DN A260	Food Science	3
DN A301	Nutrition Assessment	3
DN A312	Nutrition Communication and Counseling	3
DN A325	Food & Nutrition in Modern Alaska	3
DN A350	Foodservice Systems and Quantity Foods	3
DN A355	Weight Management and Eating Disorders	3
DN A401	Medical Nutrition Therapy I	3
DN A402	Medical Nutrition Therapy II	3
DN A415	Community Nutrition *	3
DN A430	Research Methods in Nutrition and Dietetics	3
DN A475	Advanced Nutrition	3
DN A492	Senior Seminar in Dietetics	2
PHIL A302	Biomedical Ethics	3
Electives		9
Total Credits		120

* Courses may be used to satisfy General Education Requirements.

A minimum of 120 credits is required for this degree, of which a minimum of 42 credits must be upper-division.

Program Student Learning Outcomes

At the completion of this program, students will be able to:

- Integrate scientific information and the translation of research into practice.
- Demonstrate beliefs, values, attitudes and behaviors for the professional dietitian nutritionist level of practice.
- Develop nutrition-related information, products and services to individuals, groups, and populations.
- Apply principles of management and systems in the provision of nutrition-related services to individuals and organizations.

Bachelor of Science in Nutrition

Admission to this program is currently suspended. Contact the College of Health for more information.

Minor in Nutrition

Students majoring in another discipline who wish to minor in nutrition must complete the following requirements. A Minor in Nutrition will act as a supplement to other fields of study and the application of knowledge to target populations and systems.

Code	Title	Credits
Required Core		
DN A151	Nutrition Through the Life Cycle	3
DN A203	Nutrition for Health Sciences	3
Required Upper Division Courses		
Complete 6 credits from the following:		6
DN A315	World Food Patterns	
DN A355	Weight Management and Eating Disorders	
DN A407	Preventive and Therapeutic Nutrition	
Selectives *		
Complete 6 credits of the following:		6
DN A151	Nutrition Through the Life Cycle	
DN A155	Survey of Alaska Native Nutrition	
DN A215	Sports Nutrition	
DN A255	Concepts of Healthy Food	
DN A260	Food Science	
Total Credits		18

* Other courses may be counted toward the minor with written approval of an advisor in the dietetics and nutrition program (i.e. CA A490 and DN A490).

The minor requires 18 credits; 6 credits must be upper division.

Fire and Emergency Services Technology

Allied Health Science Building (AHS), Room 148, (907) 786-6476

Fire and Emergency Services degree description web page (<http://www.uaa.alaska.edu/alliedhealth/academics/fireandemergency>).

The fire and emergency services technology program provides entry-level knowledge and skills for students planning a career in emergency services as well as providing for career advancement and professional development of current firefighters.

It may take more than two years to complete the Associate of Applied Science degree. The program has a technical core which follows the National Fire Academy's Fire and Emergency Service Higher Education (FESHE) model core curriculum for two-year degree programs. The technical core consists of courses in principles of emergency services, building construction, fire prevention, safety and survival, protection systems, and fire behavior and combustion. Each student must complete the technical core as well as MATH A105 or GER Quantitative Skills course, a natural science with lab, and

remaining UAA AAS General Course Requirements (p. 83). The student also completes courses from a variety of program electives.

For baccalaureate degree options, contact the Fire and Emergency Services Technology Department.

Program of Study

Associate of Applied Science

- AAS in Fire and Emergency Services Technology (p. 235)

Faculty

Thomas Meyer, Assistant Professor/Program Coordinator, tmeyer1@alaska.edu

Associate of Applied Science in Fire and Emergency Services Technology

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Although it is not required, it is highly recommended that students be members of a paid or volunteer fire department prior to or shortly after being admitted to the program.

Advising

Upon admission to the program, students are strongly encouraged to meet with their academic advisor each semester for the purpose of reviewing their academic progress and planning future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise.

Academic Requirements

In order to progress within the Associate of Applied Science in Fire and Emergency Services Technology program, students must earn a satisfactory grade (C or higher or P) in all FIRE and EMT courses required for the degree.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83).
- Complete all FIRE and EMT courses with a minimum grade of C.

Program Requirements

Code	Title	Credits
MATH A105	Intermediate Algebra (or GER Quantitative Skills course) *	3
EMT A130	Emergency Medical Technician I	8
FIRE A101	Principles of Emergency Services	3

FIRE A105	Fire Prevention	3
FIRE A121	Fire Behavior and Combustion	3
FIRE A206	Building Construction Issues Related to Fire Protection	3
FIRE A214	Fire Protection Systems	3
FIRE A221	Principles of Fire and Emergency Services Safety and Survival	3
FIRE A295	Fire and Emergency Services Practicum **	3

Elective Credit Requirements:

Complete 12 elective credits. These electives can be from the FEST program listed below (FIRE and EMT) or advisor-approved electives *** 12

EMT A230	Emergency Medical Technician II
EMT A231	Emergency Medical Technician III
FIRE A107	Strategy and Tactics of Fire Suppression
FIRE A111	Principles of Fire and Emergency Service Administration
FIRE A117	Rescue Practices
FIRE A123	Fire Investigation I
FIRE A131	Firefighter I, Series I
FIRE A133	Firefighter I, Series II
FIRE A135	Firefighter I, Series III
FIRE A137	Firefighter I, Series IV
FIRE A151	Wildland Fire Control I
FIRE A170	Occupational Safety and Health for Emergency Services
FIRE A190	Selected Topics in Fire and Emergency Services
FIRE A201	Principles of Emergency Management
FIRE A202	Fire Protection Hydraulics and Water Supply
FIRE A220	Legal Aspects of Emergency Services
FIRE A230	Fire Department Organizational Theory and Behavior
FIRE A231	Firefighter II

Total Credits 44

* May be used to fulfill AAS General Course Requirements (p. 83).

** Placement in FIRE A295 requires departmental approval and will require various documentation which may include background checks, proof of immunizations, release forms, proof of insurance and others as dictated by individual sites.

*** Advisor-approved electives will have a fire/emergency services relevance or will be preparatory classes for other healthcare-related fields of study (e.g. paramedic, nursing, PA, etc.).

A total of 60 credits is required for the degree.

Licensure and/or Certification

Graduates of the Associate of Applied Science in Fire and Emergency Services Technology are eligible to sit for the Emergency Medical Technician national certification from the National Registry of Emergency Medical Technicians. Students that complete EMT A130 are eligible for an institutional recommendation for the Emergency Medical Technician Initial Certification from the State of Alaska Department of Health & Social Services, Division of Public Health, Section of Emergency Programs.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Student Learning Outcomes

Students graduating with an Associate of Applied Science in Fire and Emergency Services Technology will be able to:

1. Discuss the history, support organizations, resources, incident management, training and emergency operations and relate how each plays a role within emergency services.
2. Define and use basic terms and concepts associated with the chemistry and dynamics of fire.
3. Relate how fire prevention and fire inspections are connected.
4. Demonstrate the importance of public education in relation to fire prevention.
5. Identify the equipment and systems used in control and extinguishment of fire.
6. Identify the types of building construction and their uniqueness under fire conditions and how these components are related to firefighter and life safety.
7. Relate how the basic principles and history related to the national firefighter life safety initiatives foster the need for cultural and behavioral change throughout the emergency services.

Health Sciences

Bragaw Office Building (BOB), Room 205, (907) 786-5481

www.uaa.alaska.edu/healthsciences (<http://www.uaa.alaska.edu/healthsciences>)

Programs of Study**Bachelor of Science**

- BS in Health Sciences (p. 237)

Minor

- Minor in Public Health (p. 242)

Faculty

Travis Hedwig, Assistant Professor, thedwig@alaska.edu

Bree Kessler, Assistant Professor, bckessler@alaska.edu

Corrie Whitmore, Associate Professor, cwhitmor@alaska.edu

Bachelor of Science in Health Sciences

The Department of Health Sciences takes a multi-disciplinary approach to preparing students for careers in the areas of health education and health promotion, public health, community health, health care delivery, disease prevention, and rehabilitation. The Bachelor of Science in Health Sciences (BSHS) includes three tracks:

- Health Educator
- Physician Assistant
- Pre-professional, with emphases in occupational therapy, physical therapy, physician assistant, speech-language pathology or pharmacy

Health Educator Track

The Health Educator track of the BS in Health Sciences provides training in the competencies for health educators identified by the National Health Educators Competencies Update Project and qualifies students to take the Certified Health Educator Specialist (CHES) exam. In addition, it provides education in population-based health and a community health education practicum. The Health Educator track provides a good foundation for careers or graduate study in health education, public health and community health promotion.

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Field Practicum

The practicum provides students with an opportunity to apply health sciences and health education knowledge and skills to specific assigned projects within a community health organization. Placements may become competitive. The Department of Health Sciences makes every effort to find appropriate field placements for students; however, admittance to the BSHS Health Educator Track does not guarantee acceptance by cooperating health agencies.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the Major Requirements below.

Major Requirements

Code	Title	Credits
Core Courses		
HS A210	Introduction to Environmental Health	3
HS A220	Core Concepts in the Health Sciences	3
HS A230	Introduction to Global Health	3

HS A326	Introduction to Epidemiology	3
HS A345	Planning and Implementation of Health Education Programs	3
HS/SOC A370	Medical Sociology	3
HS/HUMS A420	Introduction to Program Evaluation	3
HS/NS A433	Health Education: Theory and Practice	3
HS A492	Senior Seminar: Contemporary Health Policy	3
HS A495	Health Sciences Practicum	3
PEP A384	Cultural and Psychological Aspects of Health and Physical Activity	3
PHIL A302	Biomedical Ethics	3
PSY A372	Community Psychology	3

Support Courses

BIOL A111	Human Anatomy and Physiology I	4
BIOL A112	Human Anatomy and Physiology II	4
BIOL A240	Introductory Microbiology for Health Sciences	4
COMM A241	Public Speaking	3
DN A203	Nutrition for Health Sciences	3
WRTG A212	Writing and the Professions	3
or WRTG A213	Writing and the Sciences	
or WRTG A214	Arguing Across Contexts	
PSY A111	Introduction to Psychology	3
PSY A150	Lifespan Development	3
STAT A200	Elementary Statistics	3-4
or STAT A253	Applied Statistics for the Sciences	
or PSY A260 & A260L	Statistics for Psychology and Statistics for Psychology Lab	
SWK A243	Cultural Diversity and Community Service Learning	3

Select one course from the natural science GER list in a discipline other than Biology. 3

Select one of the following focus area sequences: 6-9

Aging

SOC A110 Introduction to Gerontology: Multidisciplinary Approach

SOC A310 Sociology of Aging
or PSY A450 Adult Development and Aging

Public Policy

PS A101 Introduction to American Government
or PS A102 Introduction to Political Science

PS A347 Public Administration

Nutrition

DN A407 Preventive and Therapeutic Nutrition

DN A415 Community Nutrition

Medical Anthropology

ANTH A202	Cultural Anthropology
ANTH A205	Biological Anthropology
ANTH A455	Culture and Health
Communication	
COMM A235	Small Group Communication
or COMM A237	Interpersonal Communication
COMM A305	Intercultural Communication
Research Methods	
PS/SOC A361	Social Science Research Methods
or PSY A261	Research Methods in Psychology
SOC A462	Social Science Statistics

A total of 120 credits is required for this degree, of which 42 must be upper-division.

Honors in Health Sciences, Health Educator Track

The BSHS Health Educator Track recognizes exceptional performance by conferring departmental honors in Health Sciences. In order to receive honors in Health Sciences, a student must meet each of the following requirements:

1. Satisfy all requirements for the BSHS Health Educator track.
2. Earn a GPA of 3.50 or higher in upper-division (300- and 400-level) BSHS core and focus sequence courses.
3. Meet the requirements for Graduation with Honors (p. 38).
4. Complete the HS A492 with a grade of B or better.
5. Complete a senior project or thesis (HS A498 or HS A499) with a grade of B or better. The Health Sciences faculty must approve the project/thesis proposal and the final written report.
6. Notify the departmental advisor in writing on or before the date of filing an Application for Graduation with the Office of the Registrar.

Physician Assistant Track

Physician assistants (PAs) are health care professionals licensed to practice medicine with physician supervision. As part of their comprehensive responsibilities, PAs conduct physical exams, diagnose and treat illnesses, order and interpret tests, counsel on preventive health care, assist in surgery, and write prescriptions. PAs practice in primary care medicine, family medicine, internal medicine, pediatrics, obstetrics and gynecology, and in surgery and the surgical subspecialties. Within the physician-PA relationship, PAs collaborate in medical decision making and provide a broad range of diagnostic and therapeutic services. PA practice may also include education, research and administrative services. Typical PA applicants come from a diversity of health care backgrounds, such as licensed practical nurse (LPN), registered nurse (RN), paramedic, corpsman and community health practitioners.

The BSHS Physician Assistant track is offered in conjunction with the MEDEX (Medicine Extension) Northwest Physician Assistant training program at the University of Washington (UW) School of Medicine. The MEDEX model was developed in 1964 at UW with

a strong emphasis on the deployment of students and graduates into medically underserved communities.

The BSHS Physician Assistant track provides a BS degree for students who complete the education and clinical experience required to work as a physician assistant. The program consists of a minimum of two years of pre-major coursework and health care experience followed by the MEDEX Northwest PA training program curriculum. The MEDEX curriculum includes one year of clinical and didactic instruction at approved training sites, and a year of clinical and family practice clerkships. UAA students can complete all of their training in Alaska.

Upon successful completion of BSHS PA track requirements (see below), UAA awards a Bachelor of Science in Health Sciences. In addition, upon successful completion of the MEDEX PA program the UW School of Medicine grants a Physician Assistant certificate. Also upon completion, students are eligible to sit for the National Certifying Examination for Physician Assistants.

Physician Assistant Students Enrolled at MEDEX

Completion of the BSHS requires a year of intense didactic instruction that will be taught in Alaska through the UW MEDEX program. While students may earn a PA certificate through a number of training programs, special arrangements have been made with UW so that the UAA BSHS Physician Assistant track may be awarded in conjunction with coursework taken through the UW MEDEX program. Students will receive their first year of coursework at UAA but will be admitted and registered at UW. Students will be co-enrolled during their clinical year clerkship to meet the UAA degree requirements. Students co-enrolled at MEDEX must complete their clinical year clerkship courses at UAA to receive the certificate from UW and their BSHS from UAA. Students who have already completed PA training and hold a PA certificate who are not co-enrolled at MEDEX should review the Certified Physician Assistant Degree Completion Admission Requirements section below.

Procedures for Participation of UAA Students in the UW MEDEX Northwest Physician Assistant Program

Up to 20 students may be admitted to the Anchorage training site of the UW MEDEX program annually, in accordance with the joint selection process established in the collaborative agreement between UAA and UW. Applicants are evaluated on their previous clinical experience and their commitment to practice in Alaska, particularly in underserved areas, in addition to their overall academic performance in the pre-physician assistant curriculum.

Alaska students admitted into the MEDEX program spend their junior year of the PA program at the UAA training site where they receive intense clinical and didactic instruction. The senior year of the BSHS program is spent in training sites throughout Alaska and the Washington, Wyoming, Alaska, Montana and Idaho (WWAMI) region currently utilized by the MEDEX program.

The practicum year corresponds to UW's year of clinical placement and supervision that completes the MEDEX certificate program. The clinical year begins in September and ends in early September the following year. The clinical placements call for 35-40 hours a week in supervised clinical training and 10-20 hours a week in self-study.

At the completion of the MEDEX PA program, students are eligible to sit for the National Certifying Examination for Physician Assistants. The UW School of Medicine grants a Physician Assistant Certificate upon successful completion of the MEDEX PA program. Upon successful completion of degree requirements (see below), UAA awards a Bachelor of Science in Health Sciences.

More information is available online about the MEDEX Northwest Physician Assistant Program (<http://www.washington.edu/medicine/som/depts/medex>).

Practicing PAs of other programs may contact the Health Sciences Department to obtain details about entering this degree pathway.

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Students who declare a Health Sciences major and do not meet the additional admission requirements listed below, but do meet the university's general admission requirements, will be admitted as Health Sciences pre-majors (see Pre-Major Admission below).

Health Care Experience

Students without health care experience should note that admission to the MEDEX program requires a minimum of two years of recent, full-time, hands-on experience in the direct delivery of medical care to patients, in addition to specific academic requirements (see Full Admission below). Students should meet with an advisor in the Health Sciences Department to discuss what type of work experience will meet this admission requirement.

More information is available online about the MEDEX Northwest Physician Assistant Program admission requirements (<http://www.washington.edu/medicine/som/depts/medex/applicants/prerequisites.htm>).

Pre-Major Admission

Students admitted as pre-majors must contact an advisor in the Health Sciences Department and plan their academic schedule carefully in order to satisfy both the UAA BSHS admission and degree requirements and the MEDEX admission and program requirements.

Full Admission

To apply for full admission to the BSHS PA Track program, students must:

1. Have completed UW MEDEX admission requirements and have received formal notification of admission to the MEDEX program or have graduated from an ARC-PA accredited program.
2. Complete a Change of Major Form requesting a change of admission status from pre-major to full major.

Students seeking admission to the MEDEX program must complete the following UAA BSHS pre-major courses. The MEDEX program requires a minimum grade of B- in each course applied toward the UW admission requirements. Students who already hold a current PA certificate do not need to take the UAA BSHS pre-major courses.

Code	Title	Credits
UAA BSHS Pre-Major Courses		
WRTG A111	Writing Across Contexts	3
WRTG A212	Writing and the Professions	3
BIOL A111	Human Anatomy and Physiology I	4
BIOL A112	Human Anatomy and Physiology II	4
Select one of the following:		
CHEM A103 & A103L	Introduction to General Chemistry and Introduction to General Chemistry Laboratory	
BIOL A102	Introductory Biology	
BIOL A240	Introductory Microbiology for Health Sciences	
Highly Recommended Courses		
PSY A111	Introduction to Psychology	3
PSY A150	Lifespan Development	3

Certified Physician Assistant Degree Completion Admission Requirements

Students who have graduated from the UW MEDEX program or another accredited PA certificate program and hold current NCCPA certification may be admitted to the UAA BSHS program to complete their degrees. This program is only available to those students who have not previously completed a bachelor's program. They must meet the Application and Admission Requirements for Baccalaureate Degrees (p. 53) and must submit official transcripts and official documentation of successful PA program completion.

Students admitted to the BSHS program who hold a current PA Certificate through an ARC-PA accredited program and satisfy all UAA requirements including completion of 30 credits in residence may be awarded credits for the certificate and apply those credits toward the BSHS. Contact the Health Sciences Department for details.

Students who have already completed PA training and hold a current PA certificate are not required to take the clinical year clerkship courses, HS A464, HS A465, or HS A466.

Academic Requirements

Students in pre-major admission status who are unsuccessful after three attempts to be admitted into the MEDEX program will be removed from the BSHS program. MEDEX students who do not successfully complete or are dismissed from the MEDEX program may be removed from the BSHS program.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85). In conjunction with a collaborative agreement between the University of Washington MEDEX program and UAA, students who hold a MEDEX PA certificate may use their MEDEX courses to meet the UAA General University Requirements that 24 upper-division credits must be completed in residence at UAA and 12 credits in the major must be completed in residence at UAA. These students will, however, be required to meet all other General

University Requirements including completion of at least 30 credits in residence at UAA.

- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the Major Requirements below.

Major Requirements

Code	Title	Credits
HS A491	Health Issues in Alaska	3
MEDEX students concurrently admitted to the BSHS degree program at UAA and the UW MEDEX program must complete the following: *		
HS A463	Physician Assistant Clinical Clerkship I	12
HS A464	Physician Assistant Clinical Clerkship II	12
HS A465	Physician Assistant Family Practice Clerkship I	12
HS A466	Physician Assistant Family Practice Clerkship II	12

* Students who already hold a current PA certificate are not required to take HS A463, HS A464, HS A465 or HS A466.

A total of 120 credits is required for the degree, of which 42 must be upper-division.

Pre-professional Track

The Bachelor of Science in Health Sciences Pre-professional (PP) track provides training in public health and health education along with preparation for occupational therapy (OT), physical therapy (PT), physician assistant (PA), speech-language pathology (SLP), pharmacy, or other professional health-related graduate programs.

Prerequisites for graduate programs vary across graduate schools. The UAA BSHS PP track includes most prerequisites for many OT, PT, PA, SLP and pharmacy graduate programs. However, students must check the prerequisites for the schools they plan to attend in order to ensure that they meet all admission requirements. Students are encouraged to meet with an advisor in the Health Sciences department early in their academic program to assist with course selection.

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the Major Requirements below.

Major Requirements

Code	Title	Credits
Core Courses		
HS A210	Introduction to Environmental Health	3
HS A220	Core Concepts in the Health Sciences	3
HS A230	Introduction to Global Health	3
HS A326	Introduction to Epidemiology	3
HS A345	Planning and Implementation of Health Education Programs	3
HS/SOC A370	Medical Sociology	3
HS/HUMS A420	Introduction to Program Evaluation	3
HS/NS A433	Health Education: Theory and Practice	3
HS A492	Senior Seminar: Contemporary Health Policy	3
PEP A384	Cultural and Psychological Aspects of Health and Physical Activity	3
PHIL A302	Biomedical Ethics	3
Support Courses		
BIOL A108	Principles and Methods in Biology	6
BIOL A111	Human Anatomy and Physiology I	4
BIOL A112	Human Anatomy and Physiology II	4
CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	4
CHEM A106 & A106L	General Chemistry II and General Chemistry II Laboratory	4
DN A203	Nutrition for Health Sciences	3
WRTG A212 or WRTG A213 or WRTG A214	Writing and the Professions Writing and the Sciences Arguing Across Contexts	3
PSY A111 or PSY A150	Introduction to Psychology Lifespan Development	3
STAT A200 or STAT A253 or PSY A260 & A260L	Elementary Statistics Applied Statistics for the Sciences Statistics for Psychology and Statistics for Psychology Lab	3-4
Select one of the following option requirements:		9-21
Occupational Therapy		
PEP A382	Kinesiology and Biomechanics	
PEP A383	Movement Theory and Motor Development	
SOC A310 or PSY A450	Sociology of Aging Adult Development and Aging	
Physical Therapy		
PEP A382	Kinesiology and Biomechanics	

PEP A383	Movement Theory and Motor Development
PHYS A123 & A123L	College Physics I and College Physics I Laboratory
PHYS A124 & A124L	College Physics II and College Physics II Laboratory
SOC A310	Sociology of Aging
or PSY A450	Adult Development and Aging
Physician Assistant	
BIOL A240	Introductory Microbiology for Health Sciences
CHEM A321	Organic Chemistry I
or PHYS A123 & A123L	College Physics I and College Physics I Laboratory
SOC A310	Sociology of Aging
or PSY A450	Adult Development and Aging
Speech-Language Pathology	
EDSL A201	Foundations of Communication Disorders
EDSL A301	Anatomy and Physiology of Speech and Hearing
EDSL A302	Phonetics
EDSL A303	Language Development Across the Lifespan
EDSL A401	Phonology and Articulation Development and Disorders
EDSL A402	Audiology
EDSL A403	Aural Rehabilitation
Pharmacy	
CHEM A321	Organic Chemistry I
CHEM A322	Organic Chemistry II
CHEM A323L	Organic Chemistry Laboratory
COMM A241	Public Speaking
ECON A201	Principles of Macroeconomics
ECON A202	Principles of Microeconomics
MATH A251	Calculus I

A total of 120 credits is required for this degree, of which 42 must be upper-division.

Honors in Health Sciences, Pre-professional Track

The BSHS Pre-professional track recognizes exceptional performance by conferring departmental honors in Health Sciences. In order to receive honors in Health Sciences, a student must meet each of the following requirements:

1. Satisfy all requirements for the BSHS Pre-professional track.
2. Earn a GPA of 3.50 or higher in upper-division (300- and 400-level) BSHS core and focus sequence courses.
3. Meet the requirements for Graduation with Honors (p. 38).
4. Complete the HS A492 with a grade of B or better.

5. Complete a senior project or thesis (HS A498 or HS A499) with a grade of B or better. The Health Sciences faculty must approve the project/thesis proposal and the final written report.
6. Notify the departmental advisor in writing on or before the date of filing an Application for Graduation with the Office of the Registrar.

Program Student Learning Outcomes

Graduates of the BSHS Health Educator track will be able to:

- Assess individual and community needs for health education.
- Plan effective health education programs.
- Implement health education programs.
- Evaluate effectiveness of health education programs.
- Coordinate provision of health education programs.
- Act as a resource person in health education.
- Communicate health and health education needs, concerns and resources.

Graduates of the BSHS Pre-Professional track will be able to:

- Demonstrate an understanding of public health and public health intervention strategies.
- Demonstrate adequate preparation for professional and/or graduate work in selected clinical concentration areas.
- Explain the interconnectedness of physical, socio-cultural, and environmental aspects of health and the role of civic engagement in promoting population based health in clinical and community settings.
- Collaborate with individuals, community groups, medical professionals, and policy makers to create culturally meaningful health and health education materials.
- Apply skills and professional expertise to meet Alaska's health workforce needs.

Graduates of the BSHS Physician Assistant track will be able to:

- Perform data collection, medical interviewing and physical examination skills, and communicate the acquired information effectively.
- Formulate medical decisions and treatment plans.
- Perform procedural skills appropriate to the Physician Assistant's role.
- Work with patients to educate them about appropriate treatments and interventions to maximize health.
- Prescribe medication and other treatment modalities to enable the physician assistant to function
- Demonstrate knowledge of pharmacology and other treatment modalities to enable the Physician Assistant to function at the full scope of practice as allowed by individual state law.
- Provide assessment and care for common mental health conditions and concerns.
- Understand the unique features of the Physician Assistant role, including the Physician Assistant's legal relationship with supervising and delegating physicians.

- Increase health care access by providing primary care services to under-served populations.

Minor in Public Health

Public health is a diverse field that focuses on improving the health of the entire population through community-based health promotion and disease prevention activities and policies. Students majoring in a subject other than health sciences who wish to minor in public health must complete the following requirements.

Code	Title	Credits
HS A220	Core Concepts in the Health Sciences	3
HS A230	Introduction to Global Health	3
HS A326	Introduction to Epidemiology	3
Complete 9 additional credits from the list below:		9
HS A210	Introduction to Environmental Health	
HS A345	Planning and Implementation of Health Education Programs	
HS/HUMS A420	Introduction to Program Evaluation	
HS/NS A433	Health Education: Theory and Practice	
HS A492	Senior Seminar: Contemporary Health Policy	
Total Credits		18

A total of 18 credits is required, of which 9 must be upper division.

Health, Physical Education and Recreation

Eugene Short Hall (ESH), Room 103, (907) 786-4083
www.uaa.alaska.edu/hper (<http://www.uaa.alaska.edu/hper>)

The Department of Health, Physical Education and Recreation (HPER) is committed to excellence in offering courses within the discipline of physical education and related disciplines. The courses provide the foundation for an undergraduate major that prepares students for leadership roles in health and fitness or outdoor recreation as well as minors and occupational endorsement certificates within the discipline. In addition, the department offers a variety of courses for students from other fields who wish to learn new physical skills and/or develop personal wellness.

Enrolling in Health, Physical Education and Recreation Courses

Acknowledgement of Risk, Release of Liability and Medical Questionnaire Form: During the first class session, students will receive information about the course. A verbal description will be provided about the inherent risks associated with specific areas and activities. Students may be asked to complete an acknowledgement of risk form and/or a release of liability statement and provide personal medical information and numbers. Students may be asked to obtain a

physical examination and medical consent from a health professional before participation in classes.

Minors: Sixteen- and 17-year-old students must receive department chair approval before they will be allowed to enroll in courses. Students under 16 cannot enroll in HPER classes. Approved students must also meet the university's Secondary School Student Enrollment Requirements (p. 47).

The university or the department reserves the right to deny or discontinue the enrollment of a student in a course or courses if the university or the department determines that the student lacks the maturity, intellectual ability or academic preparedness to participate on an equal footing with other students, or if it is otherwise not in the best interest of the university or the department for the student to participate.

Behavioral Expectations: Due to the inherent risks involved in activity courses, HPER's safety and risk management policies and procedures are strictly enforced. Students are expected to comply with all policies and procedures. HPER reserves the right to withdraw from a course any student(s) who fail(s) to demonstrate adherence to policy that may pose a safety risk to themselves or others.

Any financial reimbursements related to such withdrawals are subject to standard university refund policies.

Outdoor/Adventure Courses: HPER provides outdoor adventure education through the use of hands-on techniques. Course offerings are diverse and include topics such as backpacking, rock climbing, sea kayaking, winter camping, emergency medicine and wilderness leadership. Outdoor/adventure classes are held in Alaska's wilderness, an environment that can pose a risk to even the most experienced outdoor leader.

Students may be required to perform activities in extremely inclement weather i.e., rain, sleet, snow, wind or sub-zero temperatures. Additionally, there is an assumption that a minimum level of physical fitness is needed to succeed in and enjoy many of the activities. Consequently, before enrolling in these courses, students should review the following information.

1. **Physical Fitness Level:** Many 100-level courses have been designed for the student with an average level of fitness and health, e.g., a student would be expected to comfortably travel five miles over easy terrain. If a higher than average fitness level is required, a special note will identify the necessary level of fitness.
 - a. **Good fitness** is defined as above-average fitness relative to a typical, healthy adult. Courses that require good fitness will involve a moderate degree of physical activity, and may involve travel over challenging terrain, carrying a pack weighing up to 50 pounds, or multiple hours of exercise. A student who is physically or mentally unprepared to withstand a moderate amount of exercise should not enroll in the course.
 - b. **Excellent fitness** is defined as possessing health of outstanding quality or being in remarkably good physical condition. Excellent fitness is required for expedition courses. Expedition courses include difficult to extremely difficult terrain on uneven and steep ground with rapidly increasing elevation while carrying a backpack that may weigh 50 pounds or more in less

than ideal weather. A student who is physically or mentally unprepared to withstand an intense amount of exercise with challenging conditions should not enroll in the course.

2. **Venue and Terrain Difficulty:** Students will hike and travel in a variety of environments in outdoor/adventure courses. The following breakdown provides an overview of terrain difficulty.
 - a. **Easy terrain** can be negotiated by novices. Traveling is usually done on well-maintained trail systems; can include hiking, skiing or snowshoeing; elevation gains/losses generally under 500 feet per mile; and stream crossings of calf deep or less. Off-trail touring includes traveling on firm ground over gentle terrain.
 - b. **Moderate terrain** requires good physical fitness. Traveling is usually done on rugged trails or off trail. The hiking often includes inclines/declines of 500 to 1,500 feet per mile. Off-trail travel can include bushwhacking; uneven, wet or marshy ground; scrambling up, over or around small terrain features; and river crossings up to knee deep.
 - c. **Difficult terrain** requires excellent physical fitness. Traveling is usually done off trail and can include uneven, challenging ground; lack of firm footing; steep tundra, rock or scree; wet, snowy or icy slopes, and thigh- to waist-deep river crossings. Specialized gear may be required for travel.
 - d. **Extremely difficult terrain** requires excellent physical fitness. Traveling is done off trail and participants must be prepared to endure all of the features listed under “difficult terrain” for long hours and potentially multiple days. Specialized gear is usually required for travel.
3. **Student Health Insurance:** Students enrolling in many outdoor/adventure activity courses are provided with basic health insurance coverage during the field sessions only. This policy is intended to supplement personal policies and does not include the cost of emergency evacuation.

Programs of Study

Associate of Applied Science

- AAS in Outdoor Leadership (p. 243)

Bachelor of Science

- BS in Physical Education (p. 244)

Minors

- Minor in Athletic Training (p. 246)
- Minor in Outdoor Leadership (p. 246)

Faculty

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Carl Arts, Assistant Professor, cjarts@alaska.edu (cjarts@alaska.edu)

Timothy "TJ" Miller, Director/Assistant Professor, tjmiller@alaska.edu

Occupational Endorsement Certificate in Fitness Leadership

Admission to this program is currently suspended. Contact the College of Health for more information.

Associate of Applied Science in Outdoor Leadership

This program is delivered only through Prince William Sound College.

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83) (15 credits). At least 3 credits must be selected from the GER quantitative skills category that meet these requirements.
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
Core Courses		
PEP A161	Wilderness First Responder	4
PEP A262	Foundations of Outdoor Recreation	3
PEP A266	Introduction to Safety and Risk	3
PEP A181	Introduction to Health, Physical Education and Recreation	3
PEP A280	Leadership in Health, Physical Education and Recreation	3
PEP A287	Leadership in Outdoor Recreation Activities	2
PEP A275	Media and Strategic Communication for Outdoors Professionals	3
PEP A295	Outdoor Leadership Internship	2-3
PER A150	Water Safety and Rescue	1
PER A169	Four-Season Backpacking	3
Electives		
Select from the following:		18-19
FLM A167	Introduction to the Study of Adventure Filmmaking	
FLM A172	Previsualization and Production	
FLM A180	Digital Video Editing	
FLM A298	Adventure Film Research	
PER A112	Swiftwater Rescue	

PER A146	Beginning Rock Climbing
PER A147	Beginning Ice Climbing
PER A152	Beginning River Rafting
PER A153	Beginning Sea Kayaking
PER A155	Fly Fishing
PER A160	Beginning Cross-Country Ski: Diagonal Stride
PER A172	Fishing Academy
PER A173	Beginning Mountaineering
PER A181	Crevasse Rescue Techniques
PER A247	Intermediate Ice Climbing
PER A252	Intermediate River Rafting
Total Credits	45-47

A minimum of 60 credits is required for the degree.

Upon completion of the A.A.S. in Outdoor Leadership students will:

1. understand, synthesize, and evaluate their personal readiness for leadership by communicating leadership behaviors effectively through written and oral means (as measured by course assignments, an internship journal and an exit interview)
2. understand and explain the benefits of outdoor recreation for individual and community well-being (as measured by course assignments and an internship journal)
3. successfully evaluate risks associated with outdoor activities and identify methods to reduce and/or mitigate those risks (as measured by course assignments)
4. demonstrate necessary proficiency for recreation professionals to include practical skills related to backcountry recreation, including technical skills and event planning and hosting (as measured by course assignments and an exit interview)

Bachelor of Science in Physical Education

The core of the Bachelor of Science in Physical Education degree emphasizes the broad fundamental principles of physical education, including scientific foundations, psychological and cultural aspects, assessment and testing methods, trends, and leadership development in a variety of physical activities. Students may choose to pursue study in one of two emphasis areas within the degree: Health and Fitness Leadership or Outdoor Leadership and Administration.

The Health and Fitness Leadership and the Outdoor Leadership and Administration emphases prepare students for professional positions in rapidly growing fields. Each emphasis focuses on developing leadership expertise as well as the knowledge, physical skills and technical competencies to prepare graduates for the job market. The Health and Fitness Leadership emphasis readies students for employment in hospital-based health education and fitness programs, community or public health/fitness programs, private health clubs and fitness facilities, corporate fitness/wellness programs, military fitness centers, as personal trainers, or helps them prepare for further education in physical therapy or physical education teacher preparedness. The Outdoor Leadership

and Administration emphasis readies graduates for employment with youth or recreational programs, adventure tourism, guide services, camps, schools, or a host of experiential education opportunities.

Admission Requirements

- Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).
- Completion of BIOL A111 and PEP A181 with a grade of C or better.
- Meet with a Health, Physical Education and Recreation advisor regarding program requirements and development of a program of study.
- The degree requires computer competency which may be demonstrated by:
 - successful completion of an approved university computer course,
 - work-related experience requiring computer competency as approved by faculty or major advisor, or
 - demonstrated computer competency as approved by faculty or major advisor.

Advising

All students are encouraged to meet with their academic advisor each semester for the purpose of reviewing their academic progress and planning future courses. It is particularly important for students to meet with their advisor whenever difficulties arise.

See a Health, Physical Education and Recreation advisor for information on a recommended course sequence.

Academic Requirements

A grade of C or higher in all PEP courses and an overall GPA of 2.75 is required. A grade of B or better is required in the internship (PEP A495).

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the major requirements listed below.

Major Requirements

Code	Title	Credits
Required Support Courses *		
BIOL A111	Human Anatomy and Physiology I	4
BIOL A112	Human Anatomy and Physiology II	4
DN A203 or DN A215	Nutrition for Health Sciences Sports Nutrition	3
HS A220	Core Concepts in the Health Sciences	3
PSY A111 or PSY A150	Introduction to Psychology Lifespan Development	3

Core Courses

PEP A181	Introduction to Health, Physical Education and Recreation	3
PEP A182	Technology in Health, Physical Education and Recreation	1
PEP A183	Wellness Principles	1
PEP A184	Fundamental Motor Skills	1
PEP A280	Leadership in Health, Physical Education and Recreation	3
PEP A281	Leadership in Activities for Diverse Populations	2
PEP A282	Leadership in Initiative Activities	2
PEP A284	Leadership in Fitness Activities	2
PEP A382	Kinesiology and Biomechanics	4
PEP A383	Movement Theory and Motor Development	3
PEP A384	Cultural and Psychological Aspects of Health and Physical Activity	3
PEP A385	Physiology of Exercise	4
PEP A486	Standards and Assessment in Health, Physical Education, and Recreation	3
PEP A487	Administration and Supervision in Health, Physical Education and Recreation	3
Complete two courses from the following:		4
PEP A285	Leadership in Team Activities	
PEP A286	Leadership in Individual and Dual Activities	
PEP A287	Leadership in Outdoor Recreation Activities	
PEP A288	Leadership in Rhythmic Activities	
Total Credits		56

* Some of the courses may be used to satisfy the General Education Requirements.

Complete one the following concentration areas: Health and Fitness Leadership or Outdoor Leadership and Administration.

Health and Fitness Leadership Concentration

Code	Title	Credits
BA A151	Business Foundations	3
PEP A251	Prevention and Care of Activity-Related Injuries	3
PEP A454	Exercise Testing and Prescription	4
PEP A455	Cardiac Rehabilitation and Special Populations	4
PEP A456	Contemporary Personal Health Issues	3
PEP A495	Internship	6
Choose one of the following options:		20

Exercise Management Option

BA A231	Fundamentals of Supervision
BA A260	Marketing Practices
HS/NS A433	Health Education: Theory and Practice
or PEP A490	Selected Topics in Health, Physical Education and Recreation
PEP A453	Health Promotion
Electives	

Exercise and Rehabilitation Sciences Option

PEP A346	Lower Body Injury Assessment Skills
PEP A347	Upper Body Injury Assessment Skills

Science and Rehabilitation Core: Complete courses from at least two of the following prefixes in consultation with the faculty advisor: BIOL, CHEM, DN, PEP, PHYS, PSY

Total Credits 43

Outdoor Leadership and Administration Concentration

Code	Title	Credits
BA A151	Business Foundations	3
PEP A262	Foundations of Outdoor Recreation	3
PEP A264	Recreation Program Planning and Evaluation	3
PEP A363	Natural History Interpretation and Environmental Education	3
PEP A365	Outdoor Leadership Theory and Practice	3
PEP A464	Outdoor Recreation Administration	3
PEP A467C	Land-Based Outdoor Leadership	2
PEP A467D	Water-Based Outdoor Leadership	2
PEP A495	Internship	6
PER A169	Four-Season Backpacking	3
PHIL A303	Environmental Ethics	3
Electives		3

Choose a minimum of 6 credits from the following: 6

PER A146	Beginning Rock Climbing
PER A147	Beginning Ice Climbing
PER A148	Beginning Indoor Sport Climbing
PER A150	Water Safety and Rescue
PER A151	Beginning Canoeing
PER A152	Beginning River Rafting
PER A153	Beginning Sea Kayaking
PER A164	Skiing Alaska's Backcountry
PER A165	Avalanche Hazard Recognition and Evaluation
PER A181	Crevasse Rescue Techniques
PER A252	Intermediate River Rafting

PER A253	Intermediate Sea Kayaking	
Total Credits		43

Students who choose this concentration must also possess a current Wilderness First Responder Certification from a recognized institution at the time of completion.

A minimum of 120 credits is required for the degree, of which 42 credits must be upper division.

Honors in Physical Education

Students majoring in physical education are eligible to graduate with departmental honors by satisfying the following requirements:

1. Meet the requirements for Graduating with Honors (p. 38).
2. Meet the requirements for a BS in Physical Education.
3. Earn an overall GPA of 3.50 or higher.
4. Complete the BSPE research PEP A490 with a grade of A.

Students should notify their faculty advisor, in writing, of their intention to graduate with honors before submission of the Application for Graduation.

Program Student Learning Outcomes

Graduates of the Bachelor of Science in Physical Education will have demonstrated:

- Knowledge of physical education concepts as well as concepts related to a specific area of emphasis.
- Competency in many activity forms and proficiency in a few.
- Ability to apply established national standards in the field(s).
- Proficiency in entry-level discipline specific administrative skills.
- Proficiency in general and discipline-specific technologies.
- Effective leadership skills, including the abilities to:
 - evaluate and direct/re-direct skillful movement,
 - lead a variety of activities,
 - use appropriate motivational strategies,
 - employ appropriate safety and prevention techniques,
 - exercise sound judgment and good decision-making skills, and
 - communicate effectively.

Minor in Athletic Training

Students who wish to minor in athletic training must complete the following requirements. Prerequisites for these courses must also be satisfied. Requires a grade of C or better in PEP A346 and PEP A347.

Code	Title	Credits
DN A203 or DN A215	Nutrition for Health Sciences Sports Nutrition	3
MA A101	Medical Terminology	3
PEP A251	Prevention and Care of Activity-Related Injuries	3

PEP A346	Lower Body Injury Assessment Skills	3
PEP A347	Upper Body Injury Assessment Skills	3
PEP A382	Kinesiology and Biomechanics	4
PEP A385	Physiology of Exercise	4
Total Credits		23

A minimum of 23 credits, including 14 upper-division credits, is required for the minor.

Minor in Outdoor Leadership

Students who wish to minor in outdoor leadership must complete the following requirements.* Prerequisites for these courses must also be satisfied. Requires a grade of B or better in PEP A467C or PEP A467D.

Code	Title	Credits
PEP A262	Foundations of Outdoor Recreation	3
PEP A264	Recreation Program Planning and Evaluation	3
PEP A365	Outdoor Leadership Theory and Practice	3
PEP A467C	Land-Based Outdoor Leadership	2
PEP A467D	Water-Based Outdoor Leadership	2
PER A169	Four-Season Backpacking	3
Choose a minimum of 3 credits from the following:		3
PER A150	Water Safety and Rescue	
PER A151	Beginning Canoeing	
PER A152	Beginning River Rafting	
PER A153	Beginning Sea Kayaking	
PER A252	Intermediate River Rafting	
PER A253	Intermediate Sea Kayaking	
Choose a minimum of 3 credits from the following:		3
PER A146	Beginning Rock Climbing	
PER A147	Beginning Ice Climbing	
PER A148	Beginning Indoor Sport Climbing	
PER A164	Skiing Alaska's Backcountry	
PER A181	Crevasse Rescue Techniques	
Other requirements: Pass a swimming test and possess current certification in first aid and CPR.		
Total Credits		22

* Not available to physical education majors with the outdoor leadership and administration emphasis

A minimum of 22 credits, including 7 upper-division credits, is required for the minor.

Human Services

Professional Studies Building (PSB), Room 212, (907) 786-6437
www.uaa.alaska.edu/hums (<http://www.uaa.alaska.edu/hums>)

The Department of Human Services offers both an Associate of Applied Science (AAS) in Human Services, which prepares students for entry-level employment, and a Bachelor of Human Services (BHS) practitioner's degree, which prepares students as human services professionals. Both degrees employ a unique competency-based, community-oriented approach blending classroom and experiential learning. The AAS is articulated with the baccalaureate degree in a two-plus-two sequence. Employing a multidisciplinary approach, the degree objective is to provide students with both a conceptual and skill foundation suitable for successful human services practice in urban and rural settings. Human services practice requires multicultural understanding and respect of clients through a collaborative relationship founded upon a developmental model. Specific skill courses are combined with practicum experiences and strengthened through conceptual coursework in human services. Practicum placements provide students agency-based learning experiences directly related to the human services profession.

Advising is an important part of the human services program. Prospective students are strongly encouraged to contact a human services faculty advisor prior to entering the program. Upon declaring human services as their major, students are assigned a faculty academic advisor. Entrance into the human services practicum requires admission to the degree, successful completion of specified courses and recommendation by the human services faculty academic advisor. Contact the Human Services Department for an appointment with an advisor.

The AAS in Human Services and BHS accept specific Center for Human Development courses as electives. Courses in the Children's Behavioral Health Occupational Endorsement Certificate (p. 224) may also be accepted as electives. Please see a human services faculty advisor for information.

Both the AAS and BHS are accredited nationally by the Council for Standards in Human Services Education.

Programs of Study

Occupational Endorsement Certificate

- OEC in Conflict Resolution (p. 247)

Associate of Applied Science

- AAS in Disability Services (p. 247)
- AAS in Human Services (p. 248)

Bachelor of Human Services

- Bachelor of Human Services (p. 248)

Minor

- Minor in Human Services (p. 249)

Faculty

Jo Ann Bartley, Assistant Professor/Chair, jbartley@alaska.edu
Yvonne Chase, Assistant Professor, ymchase@alaska.edu
Lynn Paterna, Assistant Professor, lpaterna@alaska.edu

Amber Christensen-Fullmer, Assistant Professor,
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Occupational Endorsement Certificate in Conflict Resolution

The Occupational Endorsement Certificate in Conflict Resolution provides students the opportunity to acquire skills used in various conflict resolution methods used in human service agencies. The 18-credit program provides a balanced education in the study of family mediation, alternative dispute resolution, paraprofessional counseling and group facilitation. Instruction is delivered through classroom lectures, demonstrations, case studies and role plays.

Admission Requirements

Satisfy the Application and Admission Requirements for Occupational Endorsement Certificate Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Occupational Endorsement Certificates (p. 82).
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
HUMS A223	Introduction to Paraprofessional Counseling I	3
HUMS A224	Conflict and Collaborative Systems	3
HUMS A324	Introduction to Paraprofessional Counseling II	3
HUMS A333	Alternative Dispute Resolution	3
HUMS A334	Family Mediation	3
HUMS A435	Individual and Group Facilitation	3
Total Credits		18

A total of 18 credits is required for the occupational endorsement certificate.

Program Student Learning Outcomes

Students completing this certificate are prepared to:

- Understand the nature of conflict through theory and collaborative practices.
- Demonstrate enhanced communication skills and interpersonal skills to include negotiation.
- Incorporate conflict management skills in human service practice.
- Integrate concepts of diversity into various collaborative practices.

Associate of Applied Science in Disability Services

Admission to this program is currently suspended. Contact Prince William Sound College for more information.

Associate of Applied Science in Human Services

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
PSY A111 or PSY A150	Introduction to Psychology Lifespan Development	3
ANTH A200 or ANTH A202	Alaska Native Cultures Cultural Anthropology	3
HUMS A107	History and Systems of Human Services	3
HUMS A155	Human Relations in the Workplace	3
HUMS A223	Introduction to Paraprofessional Counseling I	3
HUMS A256	Groups and Organizations	3
HUMS A295A	Human Services Practicum I	3
HUMS A295B	Human Services Practicum II	3
HUMS A324	Introduction to Paraprofessional Counseling II	3
HUMS A353	Working with Individuals with Disabilities: A Human Service Perspective	3
Complete 9 credits from the following:		9
HUMS A123	Community Education and Prevention in Substance Abuse	
HUMS A125	Intervention and Prevention of High Risk Behaviors in Adolescents	
HUMS/DLS A200	Introduction to Children's Behavioral Health	
HUMS/DLS A205	Teaching Social Skills to Youth in Children's Behavioral Health	
HUMS/DLS A206	Positive Behavioral Supports in Children's Behavioral Health	
HUMS A224	Conflict and Collaborative Systems	
HUMS/DLS A385	Working with Traumatized Children	
Electives (consultation with faculty advisor recommended)		12
Total Credits		51

A total of 60 credits is required for the degree.

Program Student Learning Outcomes

Students graduating with AAS in Human Services will be able to:

- Apply the skills necessary to assess client's needs and develop a care plan.
- Demonstrate knowledge of the National Organization for Human Services (NOHS) Standards for Ethical Behavior to their professional work.
- Demonstrate active listening and paraprofessional counseling skills.
- Apply knowledge to develop community-based human service organizations.

Bachelor of Human Services

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Students must complete an Associate of Applied Science in Human Services, or the equivalent of an associate degree in a related field, from an accredited institution.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the major requirements below.

Major Requirements

Code	Title	Credits
Core Courses		
HUMS A321	Diversity Issues in Human Services Practice	3
HUMS A322	Introduction to Case Management in Human Services Practice	3
HUMS A352	Human Services Administration	3
HUMS A354	Clinical Approaches to Substance Abuse	3
HUMS A412	Ethical Issues in Human Services Practice	3
HUMS A414	Advanced Case Management for Human Services Professionals	3
HUMS A415	Advanced Human Services Systems	3
HUMS A417	Substance Abuse Counseling for Human Service Professionals	3
HUMS/HS A420	Introduction to Program Evaluation	3
HUMS A435	Individual and Group Facilitation	3
HUMS A461	Crisis Intervention	3
HUMS A495	Human Services Practicum III	3

HUMS A496	Human Services Integrative Capstone	3

Electives

Complete 6 credits from the following: 6

HUMS A333	Alternative Dispute Resolution
HUMS A334	Family Mediation
HUMS A350	Men and Masculinity Issues in Human Services Practice
HUMS/DLS A385	Working with Traumatized Children
HUMS A390	Selected Topics in Human Service Practice
HUMS A416	Substance Abuse and the Older Adult

Total Credits 45

A total of 121 credits is required for the degree, of which 42 credits must be upper division.

Program Student Learning Outcomes

Students graduating with BHS in Human Services will be able to:

- Demonstrate skills in assessing needs and providing services to individuals, families and groups.
- Apply the National Organization for Human Services (NOHS) Standards for Ethical Behavior to their professional work.
- Demonstrate skills in research design, data collection, and analysis.
- Demonstrate skills to effectively intervene with individuals from diverse populations.

Minor in Human Services

Students majoring in another subject who wish to minor in human services must complete six courses from the following list. Consultation with an advisor in the Human Services Department is highly recommended.

Code	Title	Credits
Complete 18 credits, 6 of which must be upper division, from the following courses:		18
HUMS A107	History and Systems of Human Services	
HUMS A223	Introduction to Paraprofessional Counseling I	
HUMS A224	Conflict and Collaborative Systems	
HUMS A321	Diversity Issues in Human Services Practice	
HUMS A322	Introduction to Case Management in Human Services Practice	
HUMS A324	Introduction to Paraprofessional Counseling II	
HUMS A333	Alternative Dispute Resolution	

HUMS A461	Crisis Intervention
Total Credits	18

A total of 18 credits, 6 of which must be upper division, is required for the minor.

Justice

uaa_justicecenter@alaska.edu, (907) 786-1810, uaa.alaska.edu/justice (<https://www.uaa.alaska.edu/academics/college-of-health/departments/justice-center>)

The UAA Justice Center, established by the Alaska Legislature in 1975, has a mandate to provide statewide justice-related education, research and service. The Justice Center is an interdisciplinary unit that provides undergraduate, graduate and professional education; conducts research in the areas of crime, law and justice; and provides service to government units, justice agencies, and community organizations throughout urban and rural Alaska to promote a safe, healthy and just society.

In furtherance of its academic mission, the Justice Center offers the following:

- Bachelor of Arts in Justice
- Minor in Justice
- Justice Honors
- Justice Club
- Alpha Phi Sigma National Criminal Justice Honor Society

In addition, the Justice Center also offers the following programs in Legal Studies:

- Bachelor of Arts in Legal Studies
- Minor in Legal Studies
- Associate of Applied Science in Paralegal Studies
- Legal Nurse Consulting Paralegal Undergraduate Certificate
- Post-Baccalaureate Certificate in Paralegal Studies
- Pre-law advising for UAA students

Justice faculty have professional research and service obligations beyond classroom teaching. Undergraduate students who major in justice have opportunities to work with faculty members on Justice Center research and service projects.

Students are encouraged to contact the Justice Center to speak with an academic advisor. More information about programs and advising is available on the Justice Center website (<https://www.uaa.alaska.edu/academics/college-of-health/departments/justice-center>).

Programs of Study

Bachelor of Arts

- BA in Justice (p. 250)

Minor

- Minor in Justice (p. 251)

Faculty

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Sharon Chamard, Associate Professor, sechamard@alaska.edu

Ronald Everett, Associate Professor, rseverett@alaska.edu

Ryan Fortson, Associate Professor, hfortson@alaska.edu

Kristin Knudsen, Legal Studies Program Coordinator/Associate Professor, kknudsen@alaska.edu

Bradley Myrstol, Director, Justice Center; Associate Professor, bamyrstol@alaska.edu

Troy Payne, Justice Program Coordinator; Associate Professor, tpayne9@alaska.edu

Deborah Periman, Professor, dkperiman@alaska.edu

John Angell, Professor Emeritus, ahjea@alaska.edu

Robert Congdon, Professor Emeritus, afrec@alaska.edu
(AFREC@alaska.edu)

Bachelor of Arts in Justice

The Bachelor of Arts in Justice is an interdisciplinary program that prepares students for engaged citizenship; scholarship; justice careers in private and public organizations; and advanced studies in criminology, law, criminal justice, social research, and public administration. Those graduates with records of high achievement in the justice undergraduate program are prepared to pursue advanced education in graduate, law and professional degree programs at the University of Alaska Anchorage and other universities. Graduates who receive a BA in Justice have the specialized knowledge and skills required for the evaluation, administration and improvement of police, court, and correctional policies and organizations.

Admission Requirements

- Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).
- Complete JUST A110, JUST A200, and JUST A201 with a minimum grade of D.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the Major Requirements below.

Major Requirements

Code	Title	Credits
JUST A110	Introduction to Justice	3
JUST A200	Introduction to Research Methods in Justice	3
JUST A201	Justice Data Analysis	3
JUST/SOC A251	Crime and Delinquency	3
JUST A315	Development of Law	3

JUST A330	Justice and Society	3
JUST A360	Justice Theory and Policy Analysis	3
Select two of the following:		6
JUST A334	Police and Society	
JUST A374	The Courts	
JUST A384	Contemporary Corrections	
Complete 18 credits of Justice or Legal Studies electives; 12 credits must be upper-division *		18

* Legal Studies (LEGL) courses fulfill the Justice elective requirements for the Bachelor of Arts in Justice except where the student has elected a Legal Studies minor or major. Legal Studies courses cannot be used (counted twice) to meet both the requirements of the Legal Studies minor or major and the BA in Justice. Only 6 credits of JUST A490 may be counted toward the Justice electives required for the BA in Justice.

All Justice majors must take the Justice Exit Examination. There is no minimum score required for graduation.

A total of 120 credits is required for the degree, of which 42 credits must be upper-division.

Honors in Justice

The Justice Center awards departmental honors for outstanding achievement in the study of Justice. Students majoring in Justice are eligible to graduate with Justice honors upon satisfactory completion of all of the following requirements:

1. Meet the requirements for a Bachelor of Arts in Justice.
2. Earn a 3.20 or above cumulative GPA, and a 3.50 or above Justice major GPA.
3. Complete a Justice GER integrated capstone, e.g. JUST A460 or JUST A463, with a grade of A.
4. Notify the Justice undergraduate program coordinator, in writing, of the intent to graduate with Justice honors at the time of or before submittal of an Application for Graduation.

Program Student Learning Outcomes

Students graduating with a Bachelor of Arts in Justice will be able to:

- Explain the essential principles of justice research and evaluate the results of social science research.
- Assess and critique the different theoretical perspectives in criminology.
- Evaluate the historical and contemporary philosophies of justice.
- Describe processes of justice policy development and the requirements of evidence-based policy making.
- Synthesize the history and development of the institutions of government forming the sources of American law and the social, economic and cultural forces that influence the development of law.

Minor in Justice

Students who wish to complement their studies in another discipline with knowledge of crime, law and justice may declare a Minor in Justice.

Students wishing to minor in justice must complete the following requirements.

Code	Title	Credits
JUST A110	Introduction to Justice	3
JUST/SOC A251	Crime and Delinquency	3
Upper division electives (Justice or Legal Studies) *		9
Electives (Justice or Legal Studies; any level) *		3
Total Credits		18

* *Legal studies courses fulfill the justice elective requirements for the minor in justice except where the student has elected a Bachelor of Arts or minor in legal studies; LEGL courses cannot be used (counted twice) to meet both the requirements of the minor in justice and the Bachelor of Arts or minor in legal studies.*

A total of 18 credits is required for the minor, 9 of which must be upper division.

Legal Studies

uaa_justicecenter@alaska.edu, (907) 786-1810, uaa.alaska.edu/justice (<https://www.uaa.alaska.edu/academics/college-of-health/departments/justice-center>)

The UAA Justice Center, established by the Alaska Legislature in 1975, has a mandate to provide statewide justice-related education, research and service. The Justice Center is an interdisciplinary unit that provides undergraduate, graduate and professional education; conducts research in the areas of crime, law and justice; and provides service to government units, justice agencies and community organizations throughout urban and rural Alaska to promote a safe, healthy and just society.

The Justice Center offers a variety of programs that prepare students for work in law-related or public service fields. The core of each program is a foundational sequence of courses combining theoretical knowledge of the law with skills-based training in American legal practice.

Legal Studies Goals

Students in all programs will acquire:

1. Broad-based knowledge achieved through general college education.
2. Exceptionally strong competency in critical thinking and in written and oral communication skills.
3. Clear understanding of the rules of ethics governing American judges, lawyers, and paralegals.
4. Comprehensive legal vocabulary and understanding of judicial processes.

5. Operational knowledge of legal investigatory and discovery techniques.
6. Command of skills required for legal research, critical analysis, and technical drafting.
7. Knowledge of theories of law, historical influences on the development of law, and fundamental principles of substantive law.
8. Appreciation for the role of law in the allocation of public resources and regulation of social and economic relationships.

To accomplish these goals, the following program options are offered: Undergraduate Certificate, Legal Nurse Consultant Paralegal; Associate of Applied Science, Paralegal Studies; Bachelor of Arts, Legal Studies; Minor, Legal Studies; and Post-Baccalaureate Certificate, Paralegal Studies. Students may also work toward pro bono service honors.

Programs of Study

Undergraduate Certificate

- Certificate in Legal Nurse Consultant Paralegal (p. 251)

Associate of Applied Science

- AAS in Paralegal Studies (p. 253)

Bachelor of Arts

- BA in Legal Studies (p. 255)

Minor

- Minor in Legal Studies (p. 257)

Post-Baccalaureate Certificate

- Certificate in Paralegal Studies (p. 258)

Faculty

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 Deborah Periman, Professor, dkperiman@alaska.edu

John Angell, Professor Emeritus, ahjea@alaska.edu
 Robert Congdon, Professor Emeritus, afrec@alaska.edu

Undergraduate Certificate in Legal Nurse Consultant Paralegal

The American Bar Association defines a paralegal as a person “who is employed or retained by a lawyer, law office, corporation, governmental agency or other entity and who performs specifically delegated substantive legal work for which a lawyer is responsible.” In this context, a legal nurse consultant (LNC) paralegal augments his or

her substantive legal knowledge with specialized nursing education and experience. The LNC Paralegal Undergraduate Certificate is designed for registered nurses who hold an associate or baccalaureate degree in nursing from an accredited institution. The program provides students the same core legal education all paralegal students receive, along with specialized courses directed toward medical issues in the practice of law. It prepares students to work with lawyers providing medical expertise to law firms, health care institutions, insurance companies, government agencies and other organizations handling legal matters associated with health care; disabilities, physical or mental injury, or death; medical credentialing, licensing or privileges; workers' compensation; or medical benefits. The program is approved by the American Bar Association.

Students obtaining a certificate are not authorized to provide direct legal services to the public. The program offers training for paraprofessionals who are authorized to perform substantive legal work under the supervision of a licensed attorney. The program does not train lawyers. Students completing the program may wish to sit for the American Association of Legal Nurse Consultants Certification Exam accredited by the American Board of Nursing Specialties. The program is not accredited as a nursing specialty.

Admission Requirements

- Satisfy the Application and Admission Requirements for Undergraduate Certificate Programs (p. 53).
- Students must hold an Associate of Arts or baccalaureate degree in nursing from an accredited institution before receiving the LNC Paralegal Certificate. Students holding an Associate of Applied Science in nursing who have satisfied the university's General Education Requirements may also receive the certificate. Nursing majors and pre-majors who have not completed their degree will be admitted to the program as pre-majors and may proceed through the Legal Studies and Justice courses in the program provided all individual course prerequisites are met. Courses with the LNC prefix are open to nursing graduates only.
- Students must have completed the equivalent of WRTG A111 with a minimum grade of C and (WRTG A211 or WRTG A212 or WRTG A213 or WRTG A214 or ENGL A311 or ENGL A312 or ENGL A313 or ENGL A414 or ENGL A487 with a minimum grade of B.
- Students must have achieved a minimum GPA of 2.00 in their degree program or hold a 2.00 overall GPA at UAA to be admitted to the program as majors or pre-majors.
- Students who do not meet the admissions requirements will be admitted as pre-majors. Students may take up to 12 credits of Legal Studies courses while in pre-major status.

Advising

- Students who have not completed the English prerequisites for admission to the program should begin their English coursework in their first semester as a pre-major.

- Proficiency in the use of computers and standard office software is an important component of the work of LNC paralegals. Students are strongly encouraged to build their technological skills through coursework in Computer Information and Office Systems (CIOS), Computer Information Systems (CIS), or Computer and Networking Technology (CNT) as they progress through the program.
- Campus restrictions for this program are enforced in accordance with American Bar Association Guidelines for the Approval of Paralegal Education Programs. Therefore, the certificate cannot be completed at extended campuses. Courses designated in this catalog as legal specialty courses may be taken only at the Anchorage campus.
- Students interested in the LNC Paralegal Certificate should consult a faculty advisor in the Justice Center before enrolling in Legal Studies or LNC courses.

Graduation Requirements

- Satisfy the General University Requirements for Undergraduate Certificates (p. 82).
- Complete the Program Requirements below.
- Students must achieve a minimum grade of C in each required course to receive the certificate. Courses may be repeated twice to improve grades.

Program Requirements

Code	Title	Credits
Required Core Courses		
LEGL A101	Introduction to Law	3
LEGL A215	Legal Ethics and the Role of the Legal Professional	3
LEGL A356	Legal Research, Analysis, and Writing	3
LEGL A367	Civil Procedure and Pretrial Practice	3
LEGL A377	Evidence, Investigation, and Discovery	3
LEGL A380	Torts, Workers' Compensation and Insurance Law	3
LEGL A385	Health Care Law and Regulatory Compliance	3
LEGL A487	Trial and Advanced Litigation Processes	3
LNC A347	Legal Nurse Consultant Paralegal Principles and Practices	2
LNC A348	Medical Records Review	1
NS A442	Introduction to Forensic Nursing	3
Total Credits		30

All LNC paralegal students must take the Legal Studies Exit Examination. There is no minimum score required for graduation.

A total of 30 credits is required for the certificate.

Pro Bono Service Honors

The Justice Center awards pro bono service honors to those legal studies students who work toward improving access to justice by contributing volunteer service to Alaska legal aid agencies. Students majoring in any of the legal studies programs, as well as legal studies minors, are eligible to graduate with pro bono service honors upon satisfactory completion of the following requirements:

1. Meet the catalog requirements for the minor, degree or certificate sought.
2. Complete the following number of volunteer hours with a legal services agency approved by the Legal Studies Department program coordinator:
 - a. Undergraduate Certificate, Legal Nurse Consultant Paralegal: 50 hours
3. Students intending to graduate with pro bono service honors must obtain written verification of their hours of service from the legal service agency or agencies assisted.
4. In the semester they intend to graduate, students must submit their verification of service hours and written notice of their intent to graduate with pro bono service honors to the Legal Studies Department program coordinator. The verification and notice must be received by the coordinator on or before the date established by the Office of the Registrar as the deadline to apply for graduation.

Program Student Learning Outcomes

Students graduating with an Undergraduate Certificate in Legal Nurse Consultant Paralegal will be able to:

- Produce superior university-level written documents and oral reports.
- Identify and accurately apply the rules of professional ethics governing lawyers and nonlawyer staff, and the rules governing the unauthorized practice of law in Alaska.
- Interpret and accurately apply legal terminology and foundational principles of substantive and procedural law in the analysis of legal issues.
- Develop and execute legal and medical research plans using law and medical library resources and commonly used legal and medical research databases.
- Synthesize primary and secondary legal authorities and draft memoranda of legal analysis.
- Prepare legal investigation and discovery plans and draft legal pleadings that conform to the rules of civil procedure and incorporate standard techniques and resources for managing a case in litigation.
- Integrate substantive principles of law and medical/clinical practice in the analysis of medical evidence.
- Formulate theories of injury causation pursuant to accepted principles of forensic nursing.
- Construct from the American Association of Legal Nurse Consultants (AALNC) Code of Ethics and Conduct, the AALNC's Scope and Standards of Practice, and the Alaska Bar Association's

Rules of Professional Responsibility coherent principles of ethical practice for the legal nurse consultant paralegal.

Associate of Applied Science in Paralegal Studies

The American Bar Association defines a paralegal as a person “who is employed or retained by a lawyer, law office, corporation, governmental agency or other entity and who performs specifically delegated substantive legal work for which a lawyer is responsible.”

The Associate of Applied Science in Paralegal Studies provides students with the specialized skills and knowledge to build a career performing substantive legal work under the supervision of a lawyer, in accordance with American Bar Association standards, or to work in a variety of public service and government agencies where familiarity with government regulation and legal processes is required. The program is approved by the American Bar Association.

The AAS in Paralegal Studies is coordinated with the Bachelor of Arts in Legal Studies. Students obtaining the associate degree may apply their core courses and general education credits toward completion of the baccalaureate degree.

Please note that students obtaining a degree are not authorized to provide direct legal services to the public. The program offers training for paraprofessionals who are authorized to perform substantive legal work under the supervision of a licensed attorney. The program does not train lawyers.

Admission Requirements

- Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).
- Students must have completed WRTG A111 with a minimum grade of C and WRTG A211 or WRTG A212 or WRTG A213 or WRTG A214 or ENGL A311 or ENGL A312 or ENGL A313 or ENGL A414 or ENGL A487 with a minimum grade of B.
- Students must have a 2.00 overall GPA.

Students who do not meet the admissions requirements will be admitted as pre-majors. Students may take up to 12 credit hours of Legal Studies courses while in pre-major status.

Advising

- Students who have not completed the English prerequisites for admission to the program should begin their English coursework in their first semester as a pre-major.
- Campus restrictions for this program are enforced in accordance with American Bar Association Guidelines for the Approval of Paralegal Education Programs. Therefore, the degree cannot be completed at extended campuses. Courses designated in this catalog as legal specialty courses may be taken only at the Anchorage campus.
- Students interested in the Associate of Applied Science in Paralegal Studies should consult a faculty advisor in the Justice Center before enrolling in Legal Studies courses.

- Students who plan to pursue a baccalaureate degree in addition to the associate degree should also consult an academic advisor in their intended area of baccalaureate study for appropriate general elective course selections.

Academic Requirements

Students must achieve a minimum grade of C in each Legal Studies core course and in the selected Legal Studies and Justice electives to receive the degree. Courses may be repeated twice to improve grades.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the Program Requirements below.

Program Requirements

Code	Title	Credits
Written Communication Skills		
WRTG A111	Writing Across Contexts	3
Complete one of the following with a minimum grade of B:		
WRTG A211	Writing and the Humanities	
WRTG A212	Writing and the Professions	
WRTG A213	Writing and the Sciences	
WRTG A214	Arguing Across Contexts	3
Complete one of the following with a minimum grade of B:		
ENGL A311	Writing and Rhetoric in Public Life	
ENGL A312	Advanced Technical Writing	
ENGL A313	Professional Writing	
ENGL A414	Research Writing	3
ENGL A487	Professional Editing	
Oral Communication Skills		
Complete one of the following with a minimum grade of C:		3
COMM A111	Fundamentals of Oral Communication	3
COMM A235	Small Group Communication	
COMM A237	Interpersonal Communication	
COMM A241	Public Speaking	
Quantitative Skills		
Complete 3 credits in quantitative skills from the General Education Requirements list with a minimum grade of D.		3
Computer Skills		
Complete 3 credits in Computer Information and Office Systems (CIOS) or Computer Information Systems (CIS) with a minimum grade of C.		3
General Course Requirements		

Complete 12 credits from the General Course Requirements for Associate of Applied Science Degrees with a minimum grade of D. Courses used to fulfill the Written Communication Skills, Oral Communication Skills or Quantitative Skills or degree requirements may not be used to meet this requirement. No more than 7 credits may be taken from any one disciplinary area. Students are strongly advised to select courses that also meet the General Education Requirements for Baccalaureate Degrees.

Legal Studies or Justice Elective

Complete 3 credits of any Legal Studies (LEGL) or Justice (JUST) elective at the 100 level or above with a minimum grade of C.

Core Courses

Complete the following with a minimum grade of C:

LEGL A101	Introduction to Law	3
LEGL A215	Legal Ethics and the Role of the Legal Professional	3
LEGL A356	Legal Research, Analysis, and Writing	3
LEGL A367	Civil Procedure and Pretrial Practice	3
LEGL A377	Evidence, Investigation, and Discovery	3
LEGL A487	Trial and Advanced Litigation Processes	3
LEGL A495	Legal Studies Internship	3

Upper Division Legal Studies Electives

Complete one of the following with a minimum grade of C:		3
LEGL/JUST A340	Family Law	
LEGL/JUST A352	Criminal Law and Procedure	
LEGL A362	Contracts, Debt and Principles of Ownership	
LEGL A380	Torts, Workers' Compensation and Insurance Law	
LEGL A385	Health Care Law and Regulatory Compliance	
LEGL A489	Legal Studies Senior Seminar	
Other upper division JUST or LEGL law course with Legal Studies coordinator approval		

Electives

Complete one of the following with a minimum grade of C:		3
JUST A315	Development of Law	
JUST/PS A343	Constitutional Law	
JUST A374	The Courts	
JUST/LEGL A443	Civil Liberties	

Total Credits 57

All students in the Paralegal Studies AAS must take the Legal Studies Exit Examination. There is no minimum score required for graduation.

A total of 60 credits is required for the degree.

Pro Bono Service Honors

The Justice Center awards pro bono service honors to those legal studies students who work toward improving access to justice by contributing volunteer service to Alaska legal aid agencies. Students majoring in any of the legal studies programs, as well as legal studies minors, are eligible to graduate with pro bono service honors upon satisfactory completion of the following requirements:

1. Meet the catalog requirements for the minor, degree or certificate sought.
2. Complete the following number of volunteer hours with a legal services agency approved by the Legal Studies Department program coordinator:
 - a. Associate of Applied Science, Paralegal Studies: 60 hours
3. Students intending to graduate with pro bono service honors must obtain written verification of their hours of service from the legal service agency or agencies assisted.
4. In the semester they intend to graduate, students must submit their verification of service hours and written notice of their intent to graduate with pro bono service honors to the Legal Studies Department program coordinator. The verification and notice must be received by the coordinator on or before the date established by the Office of the Registrar as the deadline to apply for graduation.

Program Student Learning Outcomes

Students graduating with an Associate of Applied Science in Paralegal Studies will be able to:

- Produce superior university-level written documents and oral reports.
- Identify and accurately apply the rules of professional ethics governing lawyers and nonlawyer staff, and the rules governing the unauthorized practice of law in Alaska.
- Interpret and accurately apply legal terminology and foundational principles of substantive and procedural law in the analysis of legal issues.
- Develop and execute legal research plans using law library resources and commonly used legal research databases.
- Synthesize primary and secondary legal authorities and draft memoranda of legal analysis.
- Prepare legal investigation and discovery plans and draft legal pleadings that conform to the rules of civil procedure and incorporate standard techniques and resources for managing a case in litigation.
- Relate legal rules and doctrines to client problems in the performance of entry-level paralegal duties in a private law firm, public legal service agency or law department.

Bachelor of Arts in Legal Studies

The Bachelor of Arts in Legal Studies provides students with a broad educational background in American law and policy that prepares them well for a lifetime of informed civic participation. Students will also acquire the technical skills and specialized knowledge that will enable them to build a career working in federal and state agencies or court

systems, in a variety of legal service settings, in private law offices or corporate legal departments, and in a multitude of other public and private organizations where familiarity with government regulation and legal processes is required. The program also lays the academic foundation for students who later wish to advance to graduate programs in law or public policy. The program is approved by the American Bar Association.

Please note that students obtaining this degree are not authorized to provide direct legal services to the public. The program offers training for paraprofessionals who are authorized to perform substantive legal work under the supervision of a licensed attorney. The program does not train lawyers.

Admission Requirements

- Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).
- Students must have completed WRTG A111 with a minimum grade of C and (WRTG A211 or WRTG A212 or WRTG A213 or WRTG A214 or ENGL A311 or ENGL A312 or ENGL A313 or ENGL A414 or ENGL A487) with a minimum grade of B.
- Students must have a 2.00 overall GPA.

Students who do not meet the admissions requirements will be admitted as pre-majors. Students may take up to 12 credit hours of Legal Studies courses while in pre-major status.

Advising

- Students who have not completed the English prerequisites for admission to the program should begin their English coursework in their first semester as a pre-major.
- Students are strongly encouraged to complete an Undergraduate Certificate in Civic Engagement or to augment their degree with a Minor in Justice or another discipline. Students should note, however, that courses that may be used to satisfy either the Legal Studies degree or the Justice Minor will not be counted toward the completion requirements of both programs.
- Proficiency in the use of computers and standard office software is an important component of legal practice. Students are strongly encouraged to build their technological skills through coursework in Computer Information and Office Systems (CIOS), Computer Information Systems (CIS), or Computer and Networking Technology (CNT) as they progress through the program.
- Campus restrictions for this program are enforced in accordance with American Bar Association Guidelines for the Approval of Paralegal Education Programs. Therefore, the Legal Studies degree cannot be completed at extended campuses. Courses designated in this catalog as legal specialty courses may be taken only at the Anchorage campus.
- Transfer credit for Legal Studies and Justice courses will be determined at the departmental level.
- Legal Studies majors who have completed the Associate of Applied Science in Paralegal Studies at the University of Alaska Fairbanks will receive full transfer credit for their courses in accordance with the articulation agreement on file in the Justice Center and posted

on the Justice Center website. However, students must complete 120 total credit hours for the degree; 42 of those credits must be upper division.

- Students interested in the Bachelor of Arts in Legal Studies should consult a faculty advisor in the Justice Center before enrolling in Legal Studies courses.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the major requirements below.
- Students must achieve a minimum grade of C in each Legal Studies core course and in the Legal Studies electives. Courses may be repeated twice to improve grades.

Major Requirements

Code	Title	Credits
Written Communications Skills		
WRTG A111	Writing Across Contexts	3
Complete one of the following (with a minimum grade of B):		3
WRTG A211	Writing and the Humanities	
WRTG A212	Writing and the Professions	
WRTG A213	Writing and the Sciences	
WRTG A214	Arguing Across Contexts	
Complete one of the following (with a minimum grade of B):		3
ENGL A311	Writing and Rhetoric in Public Life	
ENGL A312	Advanced Technical Writing	
ENGL A313	Professional Writing	
ENGL A414	Research Writing	
ENGL A487	Professional Editing	
Core Courses		
JUST A315	Development of Law	3
JUST A374	The Courts	3
LEGL A101	Introduction to Law	3
LEGL A215	Legal Ethics and the Role of the Legal Professional	3
LEGL/JUST A352	Criminal Law and Procedure	3
LEGL A356	Legal Research, Analysis, and Writing	3
LEGL A367	Civil Procedure and Pretrial Practice	3
LEGL A377	Evidence, Investigation, and Discovery	3
LEGL A487	Trial and Advanced Litigation Processes	3
LEGL A489	Legal Studies Senior Seminar	3
Electives		

Complete 15-17 credits (12 upper division) from the following list: *		15-17
ATA A133	Aviation Law and Regulations	
BA A432	Real Estate Law	
CM A401	Construction Law	
GEO A267	Boundary Law I	
GEO A457	Boundary Law II	
JPC A202	First Amendment and Media Ethics	
JPC A313	Movies and the First Amendment	
JUST/BA A241	Business Law I	
JUST/BA A242	Business Law II	
JUST/PS A343	Constitutional Law	
JUST/JPC A413	Communications Law	
LEGL/JUST A340	Family Law	
LEGL A362	Contracts, Debt and Principles of Ownership	
LEGL A380	Torts, Workers' Compensation and Insurance Law	
LEGL A385	Health Care Law and Regulatory Compliance	
LEGL A398	Individual Research	
LEGL/JUST A443	Civil Liberties	
LEGL A449	Jurisprudence and Legal Theory	
LEGL/JUST A485	Tribal Courts and Alaska Native Rights	
LEGL A495	Legal Studies Internship (with instructor approval)	
PHIL A406	Philosophy of Law	
Internship		
CEL A395	Civic Engagement Internship (with a minimum grade of C)	3-9
Total Credits		57-65

* Other upper division law courses from the Justice or Legal Studies curriculum may be used to satisfy this requirement with departmental approval. Only 6 credits of JUST A490 may be used to satisfy elective requirements for the BA in Legal Studies.

All Legal Studies majors must take the Legal Studies Exit Examination. There is no minimum score required for graduation.

A total of 120 credits is required for the degree, 30 of which must be in residence. At least 42 credits must be upper division, 24 of which must be in residence.

Pro Bono Service Honors

The Justice Center awards pro bono service honors to those legal studies students who work toward improving access to justice by contributing volunteer service to Alaska legal aid agencies. Students majoring in any of the legal studies programs, as well as legal studies minors, are eligible to graduate with pro bono service honors upon satisfactory completion of the following requirements:

1. Meet the catalog requirements for the minor, degree or certificate sought.
2. Complete the following number of volunteer hours with a legal services agency approved by the Legal Studies Department program coordinator:
 - a. Bachelor of Arts, Legal Studies: 120 hours
3. Students intending to graduate with pro bono service honors must obtain written verification of their hours of service from the legal service agency or agencies assisted.
4. In the semester they intend to graduate, students must submit their verification of service hours and written notice of their intent to graduate with pro bono service honors to the Legal Studies Department program coordinator. The verification and notice must be received by the coordinator on or before the date established by the Office of the Registrar as the deadline to apply for graduation.

Program Student Learning Outcomes

Students graduating with a Bachelor of Arts in Legal Studies will be able to:

- Produce superior university-level written documents and oral reports.
- Identify and accurately apply the rules of professional ethics governing lawyers and nonlawyer staff, and the rules governing the unauthorized practice of law in Alaska.
- Interpret and accurately apply legal terminology and foundational principles of substantive and procedural law in the analysis of legal issues.
- Develop and execute legal research plans using law library resources and commonly used legal research databases.
- Synthesize primary and secondary legal authorities and draft memoranda of legal analysis.
- Prepare legal investigation and discovery plans and draft legal pleadings that conform to the rules of civil procedure and incorporate standard techniques and resources for managing a case in litigation.
- Assess and critique theories of law and the impact of American law, both historically and currently, on social and economic relationships, access to public resources, and individual liberties.
- Construct from disparate fields of substantive law a unified theory of law as a mechanism for ordering social and economic relationships.

Minor in Legal Studies

Students seeking a baccalaureate degree in another subject may obtain a Minor in Legal Studies by completing each of the following courses. The Legal Studies Minor provides students with the technical skills and specialized knowledge to work under the supervision of lawyers in federal and state agencies or court systems, in a variety of legal service settings, in private law offices or corporate legal departments, and in a multitude of other public and private organizations where familiarity with government regulation and legal processes is required. The program also lays the academic foundation for students who later

wish to advance to graduate programs in law or public policy. The program is approved by the American Bar Association.

Please note that students obtaining a Legal Studies Minor are not authorized to provide direct legal services to the public. The program offers training for paraprofessionals who are authorized to perform substantive legal work under the supervision of a licensed attorney. The program does not train lawyers.

Advising

1. Proficiency in the use of computers and standard office software is an important component of legal practice. Students are strongly encouraged to build their technological skills through Computer Information and Office Systems (CIOS), Computer Information Systems (CIS), or Computer and Networking Technology (CNT) courses as they progress through the minor.
2. Campus restrictions for this program are enforced in accordance with American Bar Association Guidelines for the Approval of Paralegal Education Programs. Therefore, the minor cannot be completed at extended campuses. Courses designated in this catalog as legal specialty courses may be taken only at the Anchorage campus.
3. Students interested in the minor should consult a faculty advisor in the Justice Center before enrolling in LEGL courses.

Minor Requirements

A minimum grade of C in each course is required. Courses may be repeated twice to improve grades.

Code	Title	Credits
LEGL A101	Introduction to Law	3
LEGL A215	Legal Ethics and the Role of the Legal Professional	3
LEGL A356	Legal Research, Analysis, and Writing	3
LEGL A367	Civil Procedure and Pretrial Practice	3
LEGL A377	Evidence, Investigation, and Discovery	3
LEGL A487	Trial and Advanced Litigation Processes	3
LEGL A489 or LEGL A495	Legal Studies Senior Seminar Legal Studies Internship	3
Total Credits		21

All students minoring in legal studies must take the legal studies exit examination. There is no minimum score required for graduation.

Legal studies courses fulfill the justice elective requirements for the Bachelor of Art in Justice except where the student has elected a legal studies minor. Legal studies courses cannot be used (counted twice) to meet both the requirements of the legal studies minor and the Bachelor of Arts in Justice.

A total of 21 credits is required for the minor.

Pro Bono Service Honors

The Justice Center awards pro bono service honors to those legal studies students who work toward improving access to justice by contributing volunteer service to Alaska legal aid agencies. Students majoring in any of the legal studies programs, as well as legal studies minors, are eligible to graduate with pro bono service honors upon satisfactory completion of the following requirements:

1. Meet the catalog requirements for the minor, degree or certificate sought.
2. Complete the following number of volunteer hours with a legal services agency approved by the Legal Studies Department program coordinator:
 - a. Minor, Legal Studies: 50 hours
3. Students intending to graduate with pro bono service honors must obtain written verification of their hours of service from the legal service agency or agencies assisted.
4. In the semester they intend to graduate, students must submit their verification of service hours and written notice of their intent to graduate with pro bono service honors to the Legal Studies Department program coordinator. The verification and notice must be received by the coordinator on or before the date established by the Office of the Registrar as the deadline to apply for graduation.

Program Student Learning Outcomes

In addition to the broad-based knowledge and critical thinking, writing, oral communication, and quantitative skills acquired in their baccalaureate program, students who complete the Legal Studies Minor will:

1. Produce superior university-level written documents and oral reports.
2. Identify and accurately apply the rules of professional ethics governing lawyers and nonlawyer staff, and the rules governing the unauthorized practice of law in Alaska.
3. Interpret and accurately apply legal terminology and foundational principles of substantive and procedural law.
4. Develop and execute legal research plans using law library resources and commonly used legal research databases.
5. Synthesize primary and secondary legal authorities and draft memoranda of legal analysis.
6. Prepare legal investigation/discovery plans and draft legal pleadings that conform to the rules of civil procedure and incorporate standard techniques and resources for managing a case in litigation.

Post-Baccalaureate Certificate in Paralegal Studies

The American Bar Association defines a paralegal as a person “who is employed or retained by a lawyer, law office, corporation, governmental agency or other entity and who performs specifically delegated substantive legal work for which a lawyer is responsible.” The Post-Baccalaureate Certificate in Paralegal Studies is designed for students who have completed a baccalaureate degree and wish to continue their education. It provides students with the technical skills

and specialized knowledge to work under the supervision of lawyers in federal and state agencies or court systems, in a variety of legal service settings, in private law offices or corporate legal departments, and in a multitude of other public and private organizations where familiarity with government regulation and legal processes is required. The program is approved by the American Bar Association.

Please note that students obtaining a certificate are not authorized to provide direct legal services to the public. The program offers training for paraprofessionals who are authorized to perform substantive legal work under the supervision of a licensed attorney. The program does not train lawyers.

Admission Requirements

1. Students must meet the Admission Requirements for Post-Baccalaureate Certificates (p. 52).
2. Students must have completed the equivalent of:

Code	Title	Credits
WRTG A111	Writing Across Contexts	3
Select one of the following with a minimum grade of B:		3
WRTG A211	Writing and the Humanities	
WRTG A212	Writing and the Professions	
WRTG A213	Writing and the Sciences	
WRTG A214	Arguing Across Contexts	
ENGL A311	Writing and Rhetoric in Public Life	
ENGL A312	Advanced Technical Writing	
ENGL A313	Professional Writing	
ENGL A414	Research Writing	
ENGL A487	Professional Editing	

3. Students must have a cumulative grade point average of 2.00 in their baccalaureate program.

Advising

1. Students who have not completed the English prerequisites for admission to the program should begin their English coursework in their first semester.
2. Proficiency in the use of computers and standard office software is an important component of legal practice. Students are strongly encouraged to build their technological skills through coursework in Computer Information and Office Systems (CIOS), Computer Information Systems (CIS), or Computer and Networking Technology (CNT) as they progress through the program.
3. Campus restrictions for this program are enforced in accordance with American Bar Association Guidelines for the Approval of Paralegal Education Programs. Therefore, the certificate cannot be completed at extended campuses. Courses designated in this catalog as legal specialty courses may be taken only at the Anchorage campus.
4. Post-Baccalaureate certificates are subject to specific restrictions on the use of transfer credits. See Post-Baccalaureate Policies (p. 97) for details.

- Students interested in the Post-Baccalaureate Certificate in Paralegal Studies should consult a faculty advisor in the Justice Center before enrolling in Legal Studies courses.

Certificate Requirements

Code	Title	Credits
Required Core Courses		
LEGL A101	Introduction to Law	3
LEGL A215	Legal Ethics and the Role of the Legal Professional	3
LEGL A356	Legal Research, Analysis, and Writing	3
LEGL A367	Civil Procedure and Pretrial Practice	3
LEGL A377	Evidence, Investigation, and Discovery	3
LEGL A487	Trial and Advanced Litigation Processes	3
LEGL A495	Legal Studies Internship	3-6
Legal Studies Elective Courses		
Select one of the following:		3
LEGL/JUST A340	Family Law	
LEGL/JUST A352	Criminal Law and Procedure	
LEGL A362	Contracts, Debt and Principles of Ownership	
LEGL A380	Torts, Workers' Compensation and Insurance Law	
LEGL A385	Health Care Law and Regulatory Compliance	
LEGL A489	Legal Studies Senior Seminar	
Other upper division Legal Studies or Justice course with Legal Studies coordinator approval		
Total Credits		24-27

- Students must achieve a minimum grade of C in each Legal Studies core course and in the selected Legal Studies and Justice electives. Courses may be repeated twice to improve grades.
- All Paralegal Studies students must take the Legal Studies Exit Examination. There is no minimum score required for graduation.
- Students must complete at least 24 approved semester credits earned after the posting of their previous degree.
- A total of 24 credits is required for the certificate.

Pro Bono Service Honors

The Justice Center awards pro bono service honors to those legal studies students who work toward improving access to justice by contributing volunteer service to Alaska legal aid agencies. Students majoring in any of the legal studies programs, as well as legal studies minors, are eligible to graduate with pro bono service honors upon satisfactory completion of the following requirements:

- Meet the catalog requirements for the minor, degree or certificate sought.

- Complete the following number of volunteer hours with a legal services agency approved by the Legal Studies Department program coordinator:
 - Post-Baccalaureate Certificate, Paralegal Studies: 50 hours
- Students intending to graduate with pro bono service honors must obtain written verification of their hours of service from the legal service agency or agencies assisted.
- In the semester they intend to graduate, students must submit their verification of service hours and written notice of their intent to graduate with pro bono service honors to the Legal Studies Department program coordinator. The verification and notice must be received by the coordinator on or before the date established by the Office of the Registrar as the deadline to apply for graduation.

Program Student Learning Outcomes

Students graduating with a Post-Baccalaureate Certificate in Paralegal Studies will be able to:

- Produce superior university-level written documents and oral reports.
- Identify and accurately apply the rules of professional ethics governing lawyers and nonlawyer staff, and the rules governing the unauthorized practice of law in Alaska.
- Interpret and accurately apply legal terminology and foundational principles of substantive and procedural law in the analysis of legal issues.
- Develop and execute legal research plans using law library resources and commonly used legal research databases.
- Synthesize primary and secondary legal authorities and draft memoranda of legal analysis.
- Prepare legal investigation and discovery plans and draft legal pleadings that conform to the rules of civil procedure and incorporate standard techniques and resources for managing a case in litigation.
- Relate legal rules and doctrines to client problems in the performance of entry-level paralegal duties in a private law firm, public legal service agency, or law department.

Medical Assisting

Allied Health Sciences Building (AHS), Suite 148, (907) 786-6928
www.uaa.alaska.edu/academics/college-of-health/departments/school-of-allied-health/academics/medical-assisting (<https://www.uaa.alaska.edu/academics/college-of-health/departments/school-of-allied-health/academics/medical-assisting/index.cshhtml/#sthashuk3TJbRLdpuf>)

Medical assistants are multi-skilled allied health professionals specifically trained to work in ambulatory settings, such as physicians' offices, clinics and outpatient care centers. These multi-skilled personnel can perform administrative and clinical procedures. Clinical duties include assisting with examinations, recording vital signs, preparing patients for various procedures, sterilizing instruments, maintaining examining rooms, drawing blood, recording electrocardiograms, removing sutures and changing dressings. Administrative responsibilities of the medical assistant include

answering telephones and greeting patients, maintaining medical records, performing medical coding, completing health insurance forms, scheduling appointments, and preparing medical and financial reports.

The UAA Medical Assisting program offers an Associate of Applied Science in Medical Assisting, preparation for the Certified Medical Assistant (CMA) examination as well as an Occupational Endorsement Certificate in Medical Office Coding. The CMA examination preparation course of study is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board: Commission on Accreditation of Allied Health Education Programs, 25400 US Highway 19 North, Suite 158, Clearwater, FL 33763, (727) 210-2350. Students who complete the UAA CMA examination preparation courses are eligible to sit for the CMA examination. Please note: Individuals who have been found guilty of a felony, or pleaded guilty to a felony, are not eligible to take the CMA examination; however, a waiver may be granted by the American Association Medical Assistants (AAMA) Certifying Board in cases of mitigating circumstances.

In order to perform medical assisting duties, a student should have good manual dexterity, visual ability to locate patient veins and interpret color changes, and good hearing acuity. Most medical assistants should be able to lift in order to assist patients, and be able to bend, reach, and kneel; many medical assistants are required to stand for long periods of time. Please contact the Medical Assisting Department for a list of medical assisting technical standards required for students to successfully complete the clinical portion of the medical assisting program.

Programs of Study

Occupational Endorsement Certificate

- OEC in Medical Office Coding (p. 260)

Associate of Applied Science

- AAS in Medical Assisting (p. 260)

Faculty

Andria Cross, Term Assistant Professor, apcross@alaska.edu

*Pam Ventgen, Term Assistant Professor, pkventgen@alaska.edu
(pkventgen@alaska.edu)*

Occupational Endorsement Certificate in Medical Office Coding

Medical office coders work in medical office and outpatient settings coding medical records for statistical and reimbursement purposes.

This program prepares students to work as medical coders in outpatient settings. The program is based upon the American Academy of Professional coders (AAPC) recommendations. Upon successful completion of the program, students are prepared to sit for the AAPC's Certified Professional Coder (CPC) examination.

Admission Requirements

Satisfy the Application and Admission Requirements for Occupational Endorsement Certificate Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Occupational Endorsement Certificates (p. 82).
- Complete the Program Requirements below.
- Complete the core courses with a grade of C or higher. Support courses must be approved by the department advisor and completed with a grade of C or higher.

Program Requirements

Code	Title	Credits
Core Courses		
MA A101	Medical Terminology	3
MA A104	Essentials of Human Disease	3
MA A220	Coding for the Medical Office	3
MA A320	Advanced Case Studies in Medical Coding	2
Support Courses		
Complete a minimum of 6 credits from the following:		6
BIOL A100	Human Biology	
BIOL A111	Human Anatomy and Physiology I	
BIOL A112	Human Anatomy and Physiology II	
MA A235	Medical Insurance, Billing and Healthcare Documentation	
Total Credits		17

A total of 17 credits is required for this occupational endorsement certificate.

Program Student Learning Outcomes

After successful completion of this program the students will be able to demonstrate the following:

- Proficiency in the performance of Current Procedural Terminology (CPT) coding.
- Proficiency in the performance of Healthcare Common Procedure Coding System (HCPCS) coding.
- Proficiency in the performance of International Classification of Diseases, Clinical Modification diagnostic coding.

Associate of Applied Science in Medical Assisting

Admission Requirements

1. Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).
2. Submit University of Alaska Anchorage application for admission and required transcripts.

3. Take UAA-approved English and math placement tests. Call (907) 786-4500 for testing information.
4. Call (907) 786-6933 to make an appointment with a medical assisting academic advisor prior to registering for classes.

Advising

Medical assisting courses are offered in fall and spring semesters. A six-week office practice (externship) begins in May. Some courses are offered only once per year. Students should meet with an academic advisor prior to registering for classes in order to determine the best sequencing of courses for their program of study. Part-time students are welcome.

Graduation Requirements

1. Complete the General University Requirements for Associate of Applied Science Degrees (p. 83).
2. Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83) (15 credits). (Completion of BIOL A100 and PSY A150 fulfill the requirement of 6 credits of mathematics, humanities, social sciences or natural sciences.)
3. Complete the major requirements listed below, including:
 - a. Preparation for the Certified Medical Assistant (CMA) Examination requirements, and
 - b. Additional major requirements.

Major Requirements

Preparation for the Certified Medical Assistant (CMA) Examination

Demonstrate the following, or complete preparatory courses as recommended by the medical assisting academic advisor.

- Placement into MATH A055 or above, or completion of MATH A054 with a minimum grade of C.
- Placement into WRTG A111 or above, or completion, with a minimum grade of C, of PRPE A107 and WRTG A110.
- Recommended keyboarding skill of 45 wpm or completion of keyboarding course(s).
- Completion of all required courses with a grade of C or better.

Code	Title	Credits
BIOL A100	Human Biology	3
Select one of the following:		3
CIS A105	Introduction to Personal Computers and Application Software	
CIOS A130A, CIOS A135A and 1 additional credit of CIOS coursework		
MA A101	Medical Terminology	3
MA A104	Essentials of Human Disease	3
MA A120	Medical Office Procedures	4
MA A220	Coding for the Medical Office	3
MA A235	Medical Insurance, Billing and Healthcare Documentation	3

MA A250	Clinical Procedures I	4
MA A255	Clinical Procedures II	4
MA A295	Medical Office Externship	5
PSY A150	Lifespan Development	3
Total Credits		38

Successful completion of the above-listed 38 credits is required to be eligible to sit for the CMA Examination.

Additional Information Regarding MA A295

- A recent physical examination is required prior to the beginning of the externship. Each student must submit a physical examination that certifies the student is free from infectious diseases and physically able to participate in the externship portion of the program.
- Current Healthcare Provider Basic Life Support (American Heart Association) or Professional Rescuer (American Red Cross) certificate in CPR/AED for infants, children and adults, and first aid certification are required prior to the start of externship and must be kept current throughout the externship course.
- Current immunizations, proof of medical insurance and criminal background checks are required by some medical offices which serve as medical office externship sites. The cost to meet these requirements is the responsibility of the student. Students who are injured while completing externship assignments are responsible for all associated medical costs. Students are strongly encouraged to maintain personal medical insurance.
- Transportation to off-campus externship sites is the responsibility of the student.

Additional Major Requirements

Code	Title	Credits
Select from the following:		8-9
ACCT A101	Principles of Financial Accounting I	
or ACCT A120	Bookkeeping for Business I	
ASL A101	Elementary American Sign Language I	
CA A119	Principles of Nutrition	
or DN A203	Nutrition for Health Sciences	
COHI A201	Specimen Collection for Non-laboratory Personnel	
or MEDT A195A	Phlebotomy Practicum	
EMT A110	Emergency Trauma Technician	
or EMT A130	Emergency Medical Technician I	
HLTH A101	Introduction to Health Occupations	
HS A220	Core Concepts in the Health Sciences	
MA A240	Medical Transcription II	
MA A320	Advanced Case Studies in Medical Coding	
NURS A101	Introduction to Nursing	
PHAR A101	Introduction to Pharmacy	

RADT A101	Fundamentals for Limited Radiography I
Electives	0-3
Total Credits	8-12

A minimum of 60 credits is required for this degree.

Program Student Learning Outcomes

At the completion of this program, students are able to demonstrate:

1. Entry-level psychomotor, affective and cognitive curriculum content areas of medical assisting.
2. Professional and ethical behavior in the healthcare setting.
3. Commitment to the medical assisting profession by sitting for the CMA (AAMA) exam.

Medical Laboratory Science

Allied Health Sciences Building (AHS), Room 148, (907) 786-6928
www.uaa.alaska.edu/academics/college-of-health/departments/school-of-allied-health/academics/medical-laboratory-science (<https://www.uaa.alaska.edu/academics/college-of-health/departments/school-of-allied-health/academics/medical-laboratory-science>)

The mission of the Medical Laboratory Science Department is to graduate competent and ethical clinical laboratory professionals with the knowledge and the skills for career entry. It is also the department's mission to prepare graduates for leadership roles in the clinical laboratory and professional organizations and to instill an understanding of the need for maintaining continuing competency in a rapidly changing and dynamic profession.

The Medical Laboratory Science Department has a strong commitment to the career ladder approach to higher education. With career ladder programs, the students enrolled in the Bachelor of Science have an option to gain phlebotomy certification in one year and medical laboratory technician certification in two years as they pursue a bachelor's degree. The Associate of Applied Science graduates who wish to obtain a bachelor's degree in medical laboratory science may "career ladder" without loss of credit.

General admission requirements for all students entering programs offered by the Medical Laboratory Science Department include:

1. Complete the medical laboratory science program application.
2. Read and sign the essential requirements for enrollment.
3. High school diploma or GED equivalency.
4. Documentation of the following prior to enrollment in MEDT A132:
 - Immunity to rubella, rubeola, mumps and chicken pox confirmed by titer or current immunization.
 - Immunity to hepatitis A and hepatitis B. Students must have started the immunization series prior to enrolling in the courses.
 - Proof of one dose of Tdap as an adult followed by Td booster every ten years thereafter.

- Freedom from active tuberculosis, demonstrated by initial two-step PPD followed by annual PPD. If PPD is positive, provide documentation of TB clearance.

5. Documentation of the following prior to enrolling, and maintained through the duration of enrollment, in a practicum (MEDT A195A, MEDT A395 or MEDT A495):

- Influenza immunization for students enrolling in clinical practicums during flu season.
- Criminal background check within six months prior to start of practicum; some facilities also require drug screening.
- Personal medical insurance.
- Current certificate in Basic Life Support for Health Care Providers (BLS-HCP) issued by the American Heart Association.

Additional admission requirements are listed under program descriptions.

The Medical Laboratory Science Department assumes no responsibility for illness or injuries experienced by students in conjunction with student labs. It is strongly recommended that students maintain personal medical insurance while enrolled in any of the programs offered by the Medical Laboratory Science Department. Students enrolled in practicum (MEDT A195A, MEDT A395 or MEDT A495) must provide their own transportation to the clinical facility. Personal protective equipment is provided by the training facility. The clinical facilities require proof of medical insurance coverage; therefore, students are required to maintain personal medical insurance while enrolled in practicum courses. Medical insurance is available through the Student Health and Counseling Center. Liability insurance is purchased by the Medical Laboratory Science Department to cover the student's practicum. The occupational endorsement certificate, AAS and BS degrees are not contingent upon students passing any type of external certification or licensure examination.

The AAS in Medical Laboratory Technology and the BS in Medical Laboratory Science are accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Road, Suite 720, Rosemont, IL 60018-5119, (773) 714-8880. NAACLS is recognized by the U.S. Department of Education and by the Council for Higher Education.

Advising

All students are encouraged to meet with their academic advisor each semester for the purpose of reviewing their academic progress and planning future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise.

Programs of Study

Occupational Endorsement Certificates

- OEC in Clinical Assistant (p. 263)
- OEC in Phlebotomist (p. 263)

Associate of Applied Science

- AAS in Medical Laboratory Technology (p. 263)

Bachelor of Science

- BS in Medical Laboratory Science (p. 265)

Faculty

Angela Craft, Term Assistant Professor, ahumph10@alaska.edu

Grace Leu-Burke, Assistant Professor, gleuburke@alaska.edu

Occupational Endorsement Certificate in Clinical Assistant

Admission to this program is currently suspended. Contact the College of Health for more information.

Occupational Endorsement Certificate in Phlebotomist

Phlebotomists obtain blood and other samples for laboratory testing. They establish professional relationships with their patients, collect and prepare specimens, maintain collection areas and equipment, and perform record keeping duties. Students are eligible to sit for national certification examinations in phlebotomy after completion of MEDT A195A.

Admission Requirements

- Satisfy the Application and Admission Requirements for Occupational Endorsement Certificate Programs (p. 53).
- Complete the Medical Laboratory Science Department Admission Requirements (p. 262).

Advising

Courses for this OEC are offered on campus and via distance delivery. Distance students must contact the Medical Laboratory Science Department to arrange for a proctor and clinical training facility prior to enrolling in any of the courses.

Graduation Requirements

- Satisfy the General University Requirements for Occupational Endorsement Certificates (p. 82).
- Complete the Program Requirements below.
- Complete the courses listed for the OEC with a minimum grade of C or P.

Program Requirements On Campus Delivery

Code	Title	Credits
MEDT A132 & A132L	Phlebotomy and Specimen Processing Techniques and Phlebotomy and Specimen Processing Techniques Lab	4
MEDT A195A	Phlebotomy Practicum	4
MEDT A250	Cultural Diversity in Health Care	1
Total Credits		9

Program Requirements Distance Delivery

Code	Title	Credits
MEDT A132	Phlebotomy and Specimen Processing Techniques	2
MEDT A250	Cultural Diversity in Health Care	1
MEDT A195C	Phlebotomy Practicum / Distance	6
Total Credits		9

A total of 9 credits is required for the OEC.

Program Student Learning Outcomes

Students graduating with an Occupational Endorsement Certificate in Phlebotomist will be able to:

- Demonstrate entry-level competencies for phlebotomist including:
 - Select the appropriate site and demonstrate the proper technique for collecting, handling and processing blood and non-blood specimens.
 - Adhere to infection control and safety policies and procedures.
 - Identify factors that affect specimen collection procedures and test results and take appropriate actions.
 - Perform point-of-care testing according to standard operating procedures.
 - Recognize legal implications when interacting with patients, peers, other health care personnel and the public.
- Demonstrate professional conduct, stress management, interpersonal and communication skills with patients, peers and other health care personnel and the public.
- Act upon individual needs for continuing education as a function of growth and maintenance of professional competence.
- Recognize opportunities for professional development with the laboratory.

Associate of Applied Science in Medical Laboratory Technology

The National Accrediting Agency for Clinical Laboratory Sciences provides the following description: At career entry, the medical laboratory technician will be able to perform routine clinical laboratory tests (such as hematology, clinical chemistry, immunohematology, microbiology, serology/immunology, coagulation, molecular and other emerging diagnostics) as the primary analyst making specimen-oriented decisions on predetermined criteria, including a working knowledge of critical values. Communication skills will extend to frequent interactions with members of the health care team, external relations, customer service and patient education. The level of analysis ranges from waived and point-of-care testing to complex testing encompassing all major areas of the clinical laboratory. The medical laboratory technician will have diverse functions in areas of pre-analytical, analytical and post-analytical processes. The medical laboratory technician will have responsibilities for information processing, training and quality control monitoring wherever clinical laboratory testing is performed.

Upon graduation and initial employment, the medical laboratory technician should be able to demonstrate entry-level competencies in the above areas of professional practice. Graduates are eligible to sit for national certification examinations in medical laboratory technology.

Admission Requirements

Students who apply to the associate of applied science medical laboratory technology major and who qualify for admission to UAA at the associate level are admitted as pre-medical laboratory technology majors. Admission as a pre-medical laboratory technology major does not guarantee admission to the program. There are a limited number of seats available in each MEDT course. The process for advancement to the full major and the formal admission to the medical laboratory technology major are:

1. Satisfy the Application and Admission Requirements for Associate of Applied Science Programs (<https://catalog.uaa.alaska.edu/undergraduateprograms>).
2. Accepted by UAA as pre-medical laboratory technology major with official transcript evaluations (if any) completed by Enrollment Services.
3. Meet with a medical laboratory science advisor regarding application, program admission and development of a program of study.
4. Completion of specified prerequisite courses or equivalent transfer courses with a grade of C or better; grades received for courses repeated more than once will not be considered in the application process.

Code	Title	Credits
BIOL A111	Human Anatomy and Physiology I	4
BIOL A112	Human Anatomy and Physiology II	4
CHEM A103 & A103L	Introduction to General Chemistry and Introduction to General Chemistry Laboratory	4
or CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	
CHEM A104 & A104L	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Laboratory	4-7
or CHEM A106 & A106L & CHEM A321	General Chemistry II and General Chemistry II Laboratory and Organic Chemistry I	
MEDT A132 & A132L	Phlebotomy and Specimen Processing Techniques and Phlebotomy and Specimen Processing Techniques Lab	4

MEDT A133	Basic Techniques in Laboratory Medicine	2
MEDT A134	Immunology and Serology	3

5. Minimum overall grade point average (GPA) of 2.5.
5. Complete the General Admission Requirements (<https://catalog.uaa.alaska.edu/undergraduateprograms/coh/medicallaboratoryscience>) for the Medical Laboratory Science Department.
6. Upon completion of specified prerequisites and general admission requirements, submit a change of major form for the full major to the Medical Laboratory Science Department.
7. Applicants meeting the criteria described above will be ranked according to extracted science GPA, which includes specified biology, chemistry and MEDT A132/L, MEDT A133 and MEDT A134 prerequisites. The number of applicants accepted into the full major will be dependent on the number of seats available in the 200-level MEDT courses. Students not accepted into the full major may reapply.

Academic Requirements

In order to progress within the Associate of Applied Science in Medical Laboratory Technology program, students must earn a minimum grade of C or P in all Medical Laboratory Science (MEDT) courses required for the degree and demonstrate professional behavior as defined by the Medical Laboratory Science Department Core Abilities and associated behavior criteria. Satisfactory progress is demonstrated by exhibiting developing level criteria by the end of the second year (assessed by core faculty), and entry level criteria by the end of the clinical practicum (assessed by clinical instructors). Students must receive a score of 3 or higher on the developing level criteria in order to progress in the program and demonstrate the critical core abilities during clinical practicum in order to graduate from the program. Students who are unable to earn an acceptable grade in a MEDT course during their initial enrollment may attempt to earn a satisfactory grade one additional time on a space available basis.

When the number of students admitted to the program exceeds the number that can be accommodated in the clinical practicum, students are placed on an alternate list and informed they can complete their practicum should space become available, or they are given preference for a subsequent semester. Students receive a letter stating they are an alternate; students must sign and return the letter acknowledging alternate status. UAA is affiliated with clinical sites throughout the state of Alaska. Students training at clinical sites outside of Anchorage may incur additional costs related to travel and housing. The practicum coordinator will ask for volunteers to train outside of Anchorage. If there are no volunteers, students may be assigned placement. Students with higher GPAs in MEDT courses will have first preference for location. If a student is unable or unwilling to go outside of Anchorage, they will be placed on the alternate list and given preference for a subsequent semester.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83). Required support courses below may be used to fulfill AAS General Course Requirements.
- Complete the Required Support Courses and the Program Requirements listed below with a minimum grade of C or P.

Required Support Courses

Code	Title	Credits
BIOL A111	Human Anatomy and Physiology I	4
BIOL A112	Human Anatomy and Physiology II	4
CHEM A103 & A103L	Introduction to General Chemistry and Introduction to General Chemistry Laboratory	4
or CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	
CHEM A104 & A104L	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Laboratory	4-7
or CHEM A106 & A106L & CHEM A321	General Chemistry II and General Chemistry II Laboratory and Organic Chemistry I	
WRTG A212	Writing and the Professions	3
or WRTG A213	Writing and the Sciences	
Total Credits		19-22

Program Requirements

Code	Title	Credits
MEDT A132 & A132L	Phlebotomy and Specimen Processing Techniques and Phlebotomy and Specimen Processing Techniques Lab	4
MEDT A133	Basic Techniques in Laboratory Medicine	2
MEDT A134	Immunology and Serology	3
MEDT A202	Clinical Chemistry	4
MEDT A203	Clinical Microbiology	6
MEDT A204	Hematology and Coagulation	6
MEDT A208	Urine and Body Fluid Analysis	3
MEDT A211	Blood Banking	4
MEDT A250	Cultural Diversity in Health Care	1
MEDT A395	Medical Laboratory Technology Practicum	12
Total Credits		45

A minimum of 70 credits is required for the degree.

Program Student Learning Outcomes

The specific educational outcomes for the program are to produce graduates who:

- Demonstrate entry-level competencies for medical laboratory technicians in the following disciplines: hematology, chemistry, immunology, blood bank, urine and body fluid analysis, microbiology, and laboratory operations.
- Demonstrate professional behavior including sound work ethics, cultural responsiveness and appearance while interacting with patients and health care professionals.
- Demonstrate continuing competency through certification maintenance.
- Demonstrate a commitment to the laboratory profession through active involvement in a professional organization.

Bachelor of Science in Medical Laboratory Science

The National Accrediting Agency for Clinical Laboratory Sciences provides the following description for medical laboratory scientist: At career entry, the medical laboratory scientist will be proficient in performing clinical laboratory tests in areas such as hematology, clinical chemistry, immunohematology, microbiology, serology/immunology, coagulation, and molecular and other emerging diagnostics, and will be able to play a role in the development and evaluation of test systems and interpretive algorithms. Graduates will have diverse responsibilities in areas of analysis and clinical decision-making, regulatory compliance with applicable regulations, education, and quality assurance/performance improvement. They will also possess basic knowledge, skills and relevant experience in:

- Communications to enable consultative interactions with members of the health care team, external relations, customer service and patient education.
- Financial operations, marketing and human resource management of the clinical laboratory to enable cost-effective, high-quality, value-added laboratory services.
- Information management to enable effective, timely, accurate and cost-effective reporting of laboratory-generated information.
- Research design/practice sufficient to evaluate published studies as an informed consumer.

Upon graduation and initial employment, the medical laboratory scientist should be able to demonstrate entry-level competencies in the above areas of professional practice. Graduates are eligible to sit for national certification examinations in medical laboratory science after completion of the program.

Admission Requirements

Students who apply to the baccalaureate medical laboratory science major and who qualify for admission to UAA at the baccalaureate level are admitted as pre-medical laboratory science majors. Admission as a pre-medical laboratory science major does not guarantee admission to the program. There are a limited number of seats available in each

MEDT course. The process for advancement to the full major and the formal admission to the medical laboratory science major are:

1. Satisfy the Application and Admission Requirements for Baccalaureate Programs (<https://catalog.uaa.alaska.edu/undergraduateprograms>).
2. Accepted by UAA as pre-medical laboratory science major with transcript evaluations (if any) from Enrollment Services.
3. Meet with an academic advisor regarding application, program admission and development of a program of study.
4. Completion of specified prerequisite courses or equivalent transfer courses with a grade of C or better; grades received for courses repeated more than once will not be considered in the application process.

Code	Title	Credits
BIOL A111	Human Anatomy and Physiology I	4
BIOL A112	Human Anatomy and Physiology II	4
CHEM A103 & A103L	Introduction to General Chemistry and Introduction to General Chemistry Laboratory	4
or CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	
CHEM A104 & A104L	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Laboratory	4-7
or CHEM A106 & A106L & CHEM A321	General Chemistry II and General Chemistry II Laboratory and Organic Chemistry I	
MEDT A132 & A132L	Phlebotomy and Specimen Processing Techniques and Phlebotomy and Specimen Processing Techniques Lab	4
MEDT A133	Basic Techniques in Laboratory Medicine	2
MEDT A134	Immunology and Serology	3

5. Minimum overall grade point average (GPA) of 2.5.
6. Complete the General Admission Requirements (<https://catalog.uaa.alaska.edu/undergraduateprograms/coh/medicallaboratoryscience>) for the Medical Laboratory Science Department.
7. Upon completion of specified prerequisites and general admission requirements, submit a change of major form for the full major to the Medical Laboratory Science Department.
8. Applicants meeting the criteria described above will be ranked according to extracted science GPA, which includes specified biology, chemistry, MEDT A132/L, MEDT A133 and MEDT A134 prerequisites. The number of applicants accepted into the full major will be dependent on the number of seats available in the 200-level MEDT courses. Students not accepted into the full major may reapply.

Academic Requirements

In order to progress within the Bachelor of Science Medical Laboratory Science program, students must earn a minimum grade of C or P in all Medical Laboratory Science (MEDT) courses required for the degree and demonstrate professional behavior as defined by the Medical Laboratory Science Department Core Abilities and associated behavior criteria. Satisfactory progress is demonstrated by exhibiting developing level criteria by the end of the second year (assessed by core faculty), and entry level criteria by the end of the Medical Laboratory Science practicum (assessed by clinical instructors). Students must receive a score of 3 or higher on the developing level criteria in order to progress in the program and demonstrate the critical core abilities during clinical practicum in order to graduate from the program. Students who are unable to earn an acceptable grade in MEDT courses during their initial enrollment may attempt to earn a satisfactory grade one additional time on a space-available basis.

When the number of students admitted to the program exceeds the number that can be accommodated in the clinical practicum, students are placed on an alternate list and informed that they can complete their practicum should space become available, or they are given preference for a subsequent semester. Students receive a letter stating they are an alternate; students are required to sign and return the letter acknowledging alternate status. UAA is affiliated with clinical sites throughout the state of Alaska. Students training at clinical sites outside of Anchorage may incur additional costs related to travel and housing. The practicum coordinator will ask for volunteers to train outside of Anchorage. If there are no volunteers, students may be assigned placement. Students with higher GPAs in MEDT courses will have first preference for location. If a student is unable or unwilling to go outside of Anchorage, they will be placed on the alternate list and given preference for a subsequent semester.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86). Required support courses may be used to fulfill General Education Requirements.
- Complete the major requirements listed below with a minimum grade of C or P.

Major Requirements

Code	Title	Credits
Support Courses		
BIOL A111	Human Anatomy and Physiology I	4
BIOL A112	Human Anatomy and Physiology II	4
CHEM A103 & A103L	Introduction to General Chemistry and Introduction to General Chemistry Laboratory	4
or CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	

CHEM A104 & A104L	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Laboratory	4-7
or CHEM A106 & A106L & CHEM A321	General Chemistry II and General Chemistry II Laboratory and Organic Chemistry I	
MATH A151	College Algebra for Calculus (or any MATH course for which MATH A151 is a prerequisite)	4
PHIL A302 or PHIL A305	Biomedical Ethics Professional Ethics	3
STAT A200 or STAT A253	Elementary Statistics Applied Statistics for the Sciences	3-4
or any STAT course for which STAT A200 or STAT A253 is a prerequisite		

Core Requirements

MEDT A132 & A132L	Phlebotomy and Specimen Processing Techniques and Phlebotomy and Specimen Processing Techniques Lab	4
MEDT A133	Basic Techniques in Laboratory Medicine	2
MEDT A134	Immunology and Serology	3
MEDT A202	Clinical Chemistry	4
MEDT A203	Clinical Microbiology	6
MEDT A204	Hematology and Coagulation	6
MEDT A208	Urine and Body Fluid Analysis	3
MEDT A211	Blood Banking	4
MEDT A250	Cultural Diversity in Health Care	1
MEDT A301	Molecular and Emerging Diagnostics	3
MEDT A302	Clinical Laboratory Education and Management	4
MEDT A303	Advanced Clinical Microbiology	6
MEDT A306	Advanced Immunology and Blood Banking	3
MEDT A307	Clinical Correlations	2
MEDT A401	Introduction to Research	2
MEDT A495	Medical Laboratory Science Practicum	22-23
or MEDT A395 & MEDT A495	Medical Laboratory Technology Practicum and Medical Laboratory Science Practicum	
WRTG A212 or WRTG A213	Writing and the Professions Writing and the Sciences	3
Total Credits		104-109

A minimum of 122 credits is required for the degree, of which 42 credits must be upper division.

Honors in Medical Laboratory Science

Students majoring in Medical Laboratory Science are eligible to graduate with departmental honors by satisfying the following requirements:

1. Meet the requirements for a BS in Medical Laboratory Science.
2. Earn a grade point average of 3.50 or higher in courses applicable to the degree requirements. Only UAA and transfer courses taken within the last seven years will be included in the GPA for departmental honors.
3. Obtain approval to enroll in the honors elective from the program director.
4. Pass the honors elective course, MEDT A402.

Program Student Learning Outcomes

The specific educational outcomes for the program are to produce graduates who:

- Demonstrate entry-level competencies for medical laboratory scientists in the following disciplines: hematology, chemistry, immunology, blood bank, urine and body fluid analysis, microbiology, and laboratory operations.
- Demonstrate professional behavior including sound work ethics, cultural responsiveness and appearance while interacting with patients and health care professionals.
- Evaluate published studies as an informed consumer.
- Demonstrate continuing competency by certification maintenance.
- Use educator skills to create and deliver an instructional unit.
- Use laboratory management skills to plan, organize, staff and cost out a new clinical laboratory service.
- Demonstrate a commitment to the laboratory profession through active involvement in a professional organization.

Nursing

Health Science Building (HSB), Room 101, (907) 786-4550

www.uaa.alaska.edu/schoolofnursing (<http://www.uaa.alaska.edu/schoolofnursing>)

The mission of the nursing program is to educate students for productive citizenship, personal growth and professional nursing practice. The department offers potential students interested in becoming qualified to practice as a registered nurse two options: the Associate of Applied Science in Nursing and the Bachelor of Science in Nursing Science. The programs are designed to reflect Alaska's needs and health care delivery systems, although graduates are prepared for beginning practice positions in other geographic areas as well. An AAS direct articulation program is available for individuals who already hold the LPN license in Alaska. A baccalaureate completion program is available for individuals who already hold the RN license in Alaska.

The undergraduate nursing programs are approved by the Alaska Board of Nursing and accredited by the Accreditation Commission for Education in Nursing, 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326, (404) 975-5000, info@acenursing.org. Graduates of

the programs are eligible to write the National Council Licensing Examination (NCLEX) for licensure as a registered professional nurse in Alaska and other nursing jurisdictions. The baccalaureate program also provides students with the academic base for graduate study in nursing.

Information sessions are available to interested students. Times and locations are recorded on (907) 786-4560.

Programs of Study

Associate of Applied Science

- AAS in Nursing (p. 268)

Bachelor of Science

- BS in Nursing Science (p. 271)

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Associate of Applied Science in Nursing

Graduates of the Associate of Applied Science in Nursing program are prepared to use the nursing process to provide effective nursing services to individuals receiving care in inpatient settings and in structured outpatient settings. The academic program provides students with a closely related mix of theory and clinical practice; students gain experience in hospitals, nursing homes, clinics and community agencies.

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Students may complete the AAS in Nursing program in two academic years (four semesters). Admission to the clinical sequence is determined by a ranking process; admission is selective and admission requirements must be completed prior to February 1 (see items 1-6 below). Students are encouraged to submit an application to the university by August to ensure complete processing of application and transcript evaluation by February 1. Students are encouraged to complete prerequisite courses while waiting for admission to the clinical sequence.

In order to have a student file ranked for possible admission to the nursing sequence, the following items must be completed no later than February 1:

1. UAA Certificate of Admission from the Office of Admissions, including transcripts from both high school/GED and college, with transcript evaluations (if any). Documentation from transcripts must show successful completion of the following courses with a minimum grade of C: intermediate algebra, biology with laboratory, and chemistry with laboratory. Courses may have been taken at the high school or college level. Equivalent college-level courses in lieu of high school classes are: MATH A105, BIOL A102 and BIOL A103, and CHEM A055.
2. School of Nursing Application and Confidential Required Information Form sent to the School of Nursing coordinator of student affairs.
3. Three letters of reference sent to the School of Nursing coordinator of student affairs.

4. Upon completion of items 1-4, schedule an interview with a member of the AAS Admissions Committee.
5. Take the required pre-admissions test through an approved testing center. Call (907) 786-4500 for specific dates and to sign up.
6. Upon completion of items 1-6, a student's file is ranked based on a point system. Please contact the department for further details. Students are contacted in March with the results.

Once admitted to the associate degree clinical nursing courses, students are required to provide the following before beginning clinical coursework:

1. Evidence of:
 - a. Immunity to rubella, rubeola, and mumps confirmed by titer;
 - b. Immunity to hepatitis A and hepatitis B, confirmed by titer (first-semester clinical students may be in the process of completing the immunization series; for those students, documentation of immunity by titer is required prior to entry into second-year courses);
 - c. Immunity to chicken pox documented by history, titer or current immunization;
 - d. Diphtheria/tetanus vaccination within the past 10 years (with booster required at the time of expiration);
 - e. Freedom from active tuberculosis, documented annually by negative PPD skin test or by health examination by a nurse practitioner, physician, or physician's assistant;
 - f. Documentation of the influenza vaccine;
 - g. Documentation of HIV testing annually (results not required).
2. Current health provider certification in cardiopulmonary resuscitation (CPR) for infants, children and adults. First year students will have until the third week of the semester to complete this certification, which then must be kept current until graduation.
3. Professional liability insurance in the amount of \$1 million/\$3 million; insurance must be maintained throughout the duration of the student's enrollment in clinical nursing courses. Specific information regarding acceptable professional liability insurance policies may be obtained directly from the program.
4. Results of a national-level criminal background check.

Students enrolled in clinical courses must provide their own transportation to clinical assignments and will be required to purchase uniforms and specialized equipment. The school assumes no responsibility for illnesses and injuries experienced by students in conjunction with their clinical experiences; students who are injured while completing clinical assignments are responsible for all associated medical costs. It is strongly recommended that students maintain personal medical insurance.

Academic Requirements

Students must earn a satisfactory grade (C or higher or P) in all nursing courses. Students who are unable to earn an acceptable grade in a nursing course during their initial enrollment may attempt to earn a satisfactory grade one additional time on a space-available basis. Students enrolled in one course must be concurrently enrolled in all

courses with that common number (NURS A120 and NURS A120L, NURS A125 and NURS A125L, etc.).

The four-semester clinical course sequence, which begins with NURS A120/NURS A120L must be completed within four years.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83) (15 credits).
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
BIOL A111	Human Anatomy and Physiology I	4
BIOL A112	Human Anatomy and Physiology II	4
BIOL A240	Introductory Microbiology for Health Sciences	4
DN A203	Nutrition for Health Sciences	3
NURS A120 & A120L	Nursing Fundamentals and Nursing Fundamentals Laboratory	7
NURS A125 & A125L	Adult Nursing I and Adult Nursing I Laboratory	6
NURS A180	Basic Nursing Pharmacology	3
NURS A220 & A220L	Perinatal Nursing and Perinatal Nursing Laboratory	4
NURS A221	Advanced Parenteral Therapy Laboratory	1
NURS A222 & A222L	Pediatric Nursing and Pediatric Nursing Laboratory	4
NURS A225 & A225L	Adult Nursing II and Adult Nursing II Laboratory	6
NURS A250 & A250L	Psychiatric Nursing and Psychiatric Nursing Laboratory	4
NURS A255	Staff Nurse: Legal, Ethical, and Organizational Issues	1
PSY A150	Lifespan Development	3
Social Science course chosen from General Education Requirement list		3
Total Credits		57

A total of 70 credits is required for the degree.

Associate of Applied Science in Nursing, Licensed Practical Nurse Option

Licensed practical nurses may complete the AAS Nursing program in three semesters. Admission to the clinical sequence is selective and determined by a ranking process. Students are encouraged to complete

prerequisite courses while waiting to qualify for admission to the clinical sequence.

Admission Requirements

Student files entered into the admission ranking process must include documentation of the following by February 1:

1. UAA Certificate of Admission from the Office of Admissions, including high school transcripts or GED certificate and transcripts of all college work, together with UAA transcript evaluations (if needed). Transcripts must provide evidence of completion of the following courses at the high school or college level with grades of C or higher: algebra, biology with laboratory, and chemistry with laboratory. Students may use courses equivalent to the following UAA courses in lieu of work at the high school level: MATH A055, BIOL A102 and BIOL A103, and CHEM A055.
2. Successful completion of or concurrent enrollment in the following college courses or their equivalents:

Code	Title	Credits
BIOL A111	Human Anatomy and Physiology I	4
WRTG A111	Writing Across Contexts	3
PSY A150	Lifespan Development	3
Total Credits		10

3. Current active Alaska LPN license.
4. Completed School of Nursing Application and Confidential Information Form sent to the School of Nursing coordinator of student affairs.
5. Three letters of reference mailed directly to the School of Nursing coordinator of student affairs.
6. Interview with a member of the AAS Admissions Committee (scheduled after items 1-5 are completed).

When items 1-6 are complete, the student's file will be entered into the ranking process; further details about the ranking process may be obtained directly from the AAS Nursing program. Students are notified of the results of the ranking process by March 30. Once admitted to the associate degree clinical courses, students are required to provide documentation of health, CPR and liability insurance before beginning clinical coursework.

Requirements marked with an asterisk (*) are considered valid only if the expiration date does not occur prior to the end of the semester:

1. Evidence of:
 - a. Immunity to rubella, rubeola and mumps, confirmed by titer;
 - b. Immunity to hepatitis A and hepatitis B, confirmed by titer (first-semester clinical students may be in the process of completing the immunization series; for those students, documentation of immunity by titer is required prior to entry into second-year courses);
 - c. Immunity to chicken pox documented by history, titer or current immunization;

- d. Diphtheria/tetanus vaccination within the past 10 years (with booster required at the time of expiration);
 - e. Freedom from active tuberculosis, documented annually by negative PPD skin test or by health examination by a nurse practitioner, physician, or physician's assistant;*
 - f. Documentation of the influenza vaccine;
 - g. Documentation of HIV testing annually (results not required).
2. Current health provider certification in cardiopulmonary resuscitation (CPR) for infants, children and adults (information regarding acceptable courses may be obtained from the department).*
 3. Professional liability insurance in the amount of \$1 million/\$3 million; insurance must be maintained throughout the duration of the student's enrollment in clinical nursing courses. Specific information regarding acceptable professional liability insurance policies may be obtained directly from the program.*
 4. Results of a national-level criminal background check.

Students enrolled in clinical courses must provide their own transportation to clinical assignments and will be required to purchase uniforms and specialized equipment. The school assumes no responsibility for illnesses and injuries experienced by students in conjunction with their clinical experiences; students who are injured while completing clinical assignments are responsible for all associated medical costs. It is strongly recommended that students maintain personal medical insurance.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the program requirements below.

Program Requirements

Within the LPN option, licensed practical nurse students returning to school to complete the AAS in Nursing will be in the LPN direct articulation track.

LPN Direct Articulation Track

Licensed practical nurse students with a current unencumbered Alaska LPN license are eligible for the LPN direct articulation track. This track enables the LPN to enter NURS A125/NURS A125L of the AAS Nursing program. Upon successful completion of NURS A125 with a C or higher, and NURS A125L with a P, the student will be granted UAA course credits for NURS A120 and NURS A120L, for a total of 7 credits. To receive credit, the student must complete the appropriate form and pay an administrative fee per UAA policy.

Any direct articulation LPN student not passing NURS A125/NURS A125L will not receive credit for NURS A120/NURS A120L and will need to take these courses to continue toward the AAS in Nursing.

Code	Title	Credits
BIOL A111	Human Anatomy and Physiology I	4
BIOL A112	Human Anatomy and Physiology II	4
BIOL A240	Introductory Microbiology for Health Sciences	4
DN A203	Nutrition for Health Sciences	3
NURS A127	LPN to AAS Nursing Bridge	1
NURS A180	Basic Nursing Pharmacology	3
NURS A220 & A220L	Perinatal Nursing and Perinatal Nursing Laboratory	4
NURS A221	Advanced Parenteral Therapy Laboratory	1
NURS A222 & A222L	Pediatric Nursing and Pediatric Nursing Laboratory	4
NURS A225 & A225L	Adult Nursing II and Adult Nursing II Laboratory	6
NURS A250 & A250L	Psychiatric Nursing and Psychiatric Nursing Laboratory	4
NURS A255	Staff Nurse: Legal, Ethical, and Organizational Issues	1
PSY A150	Lifespan Development	3
Electives		
Complete 5 credits in a related discipline with advisor approval		5
Total Credits		47

A total of 70 credits is required for the degree.

Licensure and/or Certification

Graduates of the Associate of Applied Science in Nursing are eligible to sit for the National Council Licensure Examination (NCLEX-RN) from the National Council of State Boards of Nursing.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Student Learning Outcomes

Students graduating with an Associate of Applied Science in Nursing will be able to:

- Utilize critical thinking skills to assess and diagnose nursing needs and to prioritize, plan, implement, and evaluate care for patients and their families in institutional and community based settings.
- Effectively communicate verbally, in writing and electronically with health team members, patients and their families.
- Plan, implement and evaluate care that is safe, evidence-based, caring, and developmentally and culturally sensitive within ethical, legal and professional standards.
- Coordinate care of small groups of patients in collaboration with other members of the health care team.

- Develop a plan for lifelong learning and continuing professional development.

Bachelor of Science in Nursing Science

Students pursuing the baccalaureate degree in Nursing Science are provided both the theory and clinical base to assess, plan, implement, and evaluate health care to meet the needs of individuals, families, groups, and communities. There are two Nursing Science options: the Prelicensure Student option and the Registered Nurse option.

Pre-licensure Student Option

Admission Requirements

Students who apply to the baccalaureate nursing major and who qualify for admissions to UAA at the baccalaureate level are admitted as pre-nursing majors. Admission as a pre-nursing major does not guarantee admission to the nursing program. There are a limited number of seats available in each nursing course. Students must apply for admission to the nursing major during the semester in which they are completing the final prerequisites for the first nursing courses. Preference will be given to residents of the state of Alaska as defined by the university's policy on residency for tuition purposes. Applications must be submitted prior to October 1. The baccalaureate program will accept between 60 and 120 students each year. The School of Nursing strongly recommends that students submit their university application up to six months prior to the School of Nursing deadline to ensure complete processing of the application and transcript evaluation. The process for advancement to the major and the formal admission to the nursing major are:

1. Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).
2. Gain admission to the pre-nursing major with transcript evaluations (if any) from Enrollment Services.
3. Attend a group advising session and follow-up advising sessions with a School of Nursing advisor. Call 907-786-4560 for pre-recorded information on group advising session.
4. Complete specified prerequisite courses with a grade of C or better. Specified prerequisite courses may not be repeated more than once.

a. Code	Title	Credits
BIOL A111	Human Anatomy and Physiology I	4
BIOL A112	Human Anatomy and Physiology II	4
CHEM A103 & A103L	Introduction to General Chemistry and Introduction to General Chemistry Laboratory	4
CHEM A104 & A104L	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Laboratory	4
WRTG A111	Writing Across Contexts	3
WRTG A213	Writing and the Sciences	3

Complete one of the following three reasoning skills courses: 3

ENGL A120	Critical Thinking
PHIL A101	Introduction to Logic
PHIL A201	Introduction to Philosophy

Oral communications GER 3

Humanities or fine arts or social science GER 3

Total Credits 31

* For students not required to take WRTG A111, another written communication General Education Requirement (GER) course must be completed to total 6 credits. For transfer students, grades from equivalent courses are substituted.

An extracted minimum grade point average (GPA) of 3.00 for courses is required for the Bachelor of Science in Nursing Science. The GPA is calculated using grades from all courses required for the nursing major and completed at the time of application to the nursing major.

5. Enrollment in or completion of (a grade of C or higher is required in these courses):

a. Code	Title	Credits
BIOL A240	Introductory Microbiology for Health Sciences	4
PSY A150	Lifespan Development	3
Two humanities or fine arts or social science GERs		6

Either the reasoning skills requirement or PSY A150 must be completed at the time of application to the baccalaureate major. Students must be enrolled in whichever of these requirements has not been completed.

6. Complete the first 34 credits, as outlined in No. 4, and during enrollment in courses outlined in No. 5, meet with a nursing advisor to verify course completion and GPA and complete the application to the nursing major. Call (907) 786-4550 to set up an appointment.
7. Complete the pre-admission test.
8. Complete the School of Nursing application file by the October 1 deadline.
- School of Nursing Application and Confidential Required Information Form on file in the school.
 - Three letters of recommendation.
 - A current Plan of Study signed by a School of Nursing advisor on file with the School of Nursing.
 - Scores on pre-admission test.
9. Consideration of the application by the Admissions Committee:
- Formal admission to the nursing program is based on the student's relative standing on the minimum requirements outlined above. October 1 is the deadline for consideration by the Admissions Committee.

- All applicants meeting the criteria described above will then be ranked according to the following three criteria for the admissions process:

- Extracted minimum grade point average
- Extracted science GPA, which includes CHEM A103 and CHEM A104, and BIOL A111 and BIOL A112
- Pre-admission test scores

10. Achieve a C or higher in the specified courses for the major that are in progress when admission is sought (See No. 5.), and maintain a minimum 3.00 GPA until the semester of enrollment in beginning nursing courses (NS A204, NS A216, and NS A300).

Academic Requirements

In order to progress within the clinical nursing major, students must earn a satisfactory grade (C or higher or P) in all NS courses.

Re-enrollment: Students who are unable to earn an acceptable grade in a nursing course during their initial enrollment may attempt to earn a satisfactory grade one additional time on a space available basis. If a student is unable to earn a passing grade in a second nursing course, they will be considered for dismissal according to the terms outlined in the School of Nursing B.S. Program Student Handbook.

Concurrent enrollment: Students enrolled in one course must be concurrently enrolled in all courses with that common number:

Code	Title	Credits
NS A313 & A313L	Health Disruptions I and Health Disruptions I Laboratory	6
NS A315 & A315L	Health I: Nursing Therapeutics and Health I: Nursing Therapeutics Laboratory	6
NS A401 & A401L	Health Disruptions II and Health Disruptions II Laboratory	5.5
NS A406 & A406L	Nursing Therapeutics in Complex Health Disruptions and Nursing Therapeutics in Complex Health Disruptions Laboratory	5.0
NS A411 & A411L	Population Health Integrative Capstone and Population Health Integrative Capstone Laboratory	5.5
NS A416 & A416L	Concentration in Clinical Nursing and Concentration in Clinical Nursing Lab	4

Pre-licensure student option progress: The four-semester clinical sequence must be completed in eight semesters and no more than a one-semester delay between sequential clinical courses will be permitted without validation of continued competence and currency.

Clinical Requirements

All students who are admitted to clinical nursing courses are required to provide copies of documentation of health and CPR prior to beginning those courses. Requirements marked with an asterisk (*) are considered valid only if the expiration date does not occur prior to the end of the semester of current enrollment:

- Evidence of:
 - Immunizations for, or immunity to, key conditions consistent with current clinical guidelines.
 - Documentation of HIV testing annually (results not required).
- Current health provider certification in cardiopulmonary resuscitation (CPR) for infants, children and adults (information regarding acceptable courses may be obtained from the department).*
- Results of a national level criminal background check.

Students enrolled in clinical courses must provide their own transportation to clinical assignments and are required to purchase uniforms and specialized equipment.

It is strongly recommended that students maintain personal medical insurance. The school assumes no responsibility for illnesses and injuries experienced by students in conjunction with their clinical experiences; students who are injured while completing clinical assignments are responsible for all associated medical costs.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the major requirements below.

Major Requirements

Complete the following support courses for the nursing science major with a grade of C or better:

Code	Title	Credits
Nursing Support Courses		
BIOL A111	Human Anatomy and Physiology I *	4
BIOL A112	Human Anatomy and Physiology II *	4
BIOL A240	Introductory Microbiology for Health Sciences *	4
CHEM A103 & A103L	Introduction to General Chemistry and Introduction to General Chemistry Laboratory *	4
CHEM A104 & A104L	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Laboratory *	4
DN A203	Nutrition for Health Sciences *	3
PHIL A302	Biomedical Ethics	3

WRTG A213	Writing and the Sciences	3
Reasoning Skills **		
ENGL A120	Critical Thinking	3
or PHIL A101	Introduction to Logic	
or PHIL A201	Introduction to Philosophy	
Social Sciences GER		
PSY A150	Lifespan Development	3
Quantitative Skills GER		
STAT A200	Elementary Statistics	3-4
or STAT A307	Probability and Statistics	
Total Credits		38-39

* Courses must be completed prior to admission to clinical nursing courses.

** Must be in addition to the General Education Requirements.

Complete the required nursing courses for the nursing science major:

Code	Title	Credits
Required Nursing Courses		
NS A204	Technology and Nursing Informatics	3
NS A216	Pathophysiology	4
NS A300	Foundations of Nursing I: Roles, Processes, and Trends	3
NS A303 & A303L	Foundations of Nursing Practice: Therapeutics and Foundations of Nursing Practice: Therapeutics Laboratory	7.5
NS A307 & A307L	Foundations of Nursing Practice: Health Assessment Theory and Foundations of Nursing Practice: Health Assessment Laboratory	3
NS A309	Pharmacology in Nursing	3
NS A313 & A313L	Health Disruptions I and Health Disruptions I Laboratory	6
NS A315 & A315L	Health I: Nursing Therapeutics and Health I: Nursing Therapeutics Laboratory	6
NS A400	Evidence-Based Nursing Practice	3
NS A401 & A401L	Health Disruptions II and Health Disruptions II Laboratory	5.5
NS A406 & A406L	Nursing Therapeutics in Complex Health Disruptions and Nursing Therapeutics in Complex Health Disruptions Laboratory	5

NS A411 & A411L	Population Health Integrative Capstone and Population Health Integrative Capstone Laboratory	5.5
NS A415	Nursing Management and Legal Perspectives	4
NS A416 & A416L	Concentration in Clinical Nursing and Concentration in Clinical Nursing Lab	4
Upper-division nursing elective		3
Total Credits		65.5

A total of 120 credits is required for the degree; 42 credits must be upper-division.

Registered Nurse Option

For students who hold current licensure as a registered professional nurse in the state of Alaska, the school offers “RN-only” courses and sections within the nursing major designed to build upon the RN’s basic preparation and experience and to facilitate progress in meeting program objectives. Previous college credits are evaluated for comparability to established requirements within the program and may be accepted for transfer; in addition, credit by examination is available to satisfy some GERs. Additional information is available upon request.

Admission Requirements

Registered nurses returning to complete the baccalaureate degree in nursing science must successfully complete the same academic prerequisites as basic students. Students who apply to the baccalaureate nursing major and who qualify for admission to baccalaureate study are admitted as pre-nursing majors. Admission as a pre-nursing major does not guarantee admission to the nursing program. Registered nurses must apply for admission to the nursing major during the semester in which they are completing the final prerequisites for NS A205. The deadline for RN admission is November 1 for the following summer. Formal admission to the nursing program is based on the registered nurse’s relative standing on the following minimum requirements:

1. Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).
2. Accepted by UAA as pre-nursing major with transcript evaluations from Enrollment Services.
3. Current licensure as a registered professional nurse, preferably in the state of Alaska. Verification of licensure on file with the school.
4. A current plan of study signed by a nursing advisor and the RN student on file with the School of Nursing. The student may call (907) 786-4550 to set up an advising session.
5. An extracted minimum GPA of 2.00. The GPA will be calculated using grades from all courses which are required for the nursing major that have been completed at the time of application to the major.
6. A grade of C or better in all specified courses required for the nursing major.
7. Completion of specified prerequisite courses at the time of application to the major:

a. Code	Title	Credits
BIOL A111	Human Anatomy and Physiology I	4
BIOL A112	Human Anatomy and Physiology II	4
BIOL A240	Introductory Microbiology for Health Sciences	4
CHEM A103 & A103L	Introduction to General Chemistry and Introduction to General Chemistry Laboratory	4
CHEM A104 & A104L	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Laboratory	4
ENGL A120 or PHIL A101 or PHIL A201	Critical Thinking Introduction to Logic Introduction to Philosophy	3
PSY A150	Lifespan Development	3
WRTG A111	Writing Across Contexts	3
WRTG A213	Writing and the Sciences	3
Oral communication GER		3
Humanities or fine arts or social science GER		3
Total Credits		38

- b. * *For students not required to take WRTG A111, another English composition course will be substituted. For transfer students, grades from equivalent courses will be substituted.*

8. Achieve a grade of C in the specified courses for the major that are in progress when admission is sought and maintain a minimum 2.00 GPA until beginning nursing courses.
9. A School of Nursing application on file in the school.
10. Three letters of recommendation, two of which must be professional recommendations.

Registered nurse students not formally admitted by UAA as baccalaureate-seeking students in the nursing program or admitted as pre-nursing majors are eligible to take nursing electives for which prerequisites have been met.

RN Clinical Requirements

See Clinical Requirements under the Pre-licensure Student Option (p. 271).

RN Academic Requirements

See Academic Requirements under the Pre-licensure Student Option (p. 271).

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).

- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the major requirements below.

Major Requirements

Complete the following support courses. All support courses must be completed with a grade of C or better prior to admission to 300-level clinical nursing courses:

Code	Title	Credits
Nursing Support Courses		
BIOL A111	Human Anatomy and Physiology I	4
BIOL A112	Human Anatomy and Physiology II	4
BIOL A240	Introductory Microbiology for Health Sciences	4
CHEM A103 & A103L	Introduction to General Chemistry and Introduction to General Chemistry Laboratory	4
CHEM A104 & A104L	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Laboratory	4
DN A203	Nutrition for Health Sciences	3
PHIL A302	Biomedical Ethics	3
WRTG A213	Writing and the Sciences	3
Reasoning Skills **		
ENGL A120	Critical Thinking	3
or PHIL A101	Introduction to Logic	
or PHIL A201	Introduction to Philosophy	
Social Sciences GER		
PSY A150	Lifespan Development	3
Quantitative Skills GER		
STAT A200	Elementary Statistics	3-4
or STAT A307	Probability and Statistics	
Total Credits		38-39

** Must be in addition to the General Education Requirements.

RN Licensure Credit

An accepted, degree-seeking UAA nursing student who has successfully passed the National Council Licensing Examination (NCLEX) and has current RN licensure in the state of Alaska may be granted the following UAA course credits upon admission to the nursing major:

Code	Title	Credits
NS A216	Pathophysiology	4
NS A309	Pharmacology in Nursing	3
NS A303 & A303L	Foundations of Nursing Practice: Therapeutics and Foundations of Nursing Practice: Therapeutics Laboratory	7.5

NS A313 & A313L	Health Disruptions I and Health Disruptions I Laboratory	6
NS A401 & A401L	Health Disruptions II and Health Disruptions II Laboratory	5.5
NS A406 & A406L	Nursing Therapeutics in Complex Health Disruptions and Nursing Therapeutics in Complex Health Disruptions Laboratory	5
Total Credits		31

An administrative fee will be charged for these credits. To receive credits, the student must complete the appropriate form with a nursing advisor. Contact the School of Nursing (907) 786-4550 for further information.

Complete the following required nursing courses:

Code	Title	Credits
Required Nursing Courses		
NS A205	Nursing Informatics *	3
NS A305 & A305L	Health Assessment of Individuals and Health Assessment of Individuals Laboratory *	3
NS A308	Dimensions of Professional Nursing *	3
NS A314 & A314L	Health I for Registered Nurses and Health I for Registered Nurses Laboratory *	4
NS A400	Evidence-Based Nursing Practice	3
NS A411 & A411L	Population Health Integrative Capstone and Population Health Integrative Capstone Laboratory	5.5
NS A417	Management in Nursing	3
Upper-division nursing electives **		6
Total Credits		30.5

* Courses must be completed with a grade of C or better prior to admission to 400-level clinical nursing courses.

** Three credits of nursing electives may be met with a current recognized nursing certification.

Complete elective credits to total 120 credits.

A total of 120 credits is required for the degree, 42 credits of which must be upper-division.

Honors in Nursing

Students majoring in nursing science are eligible to graduate with departmental honors by satisfying the following requirements:

1. Meet the requirements for Graduation with Honors (p. 38).
2. Meet the requirements for a BS in Nursing Science.
3. Earn a GPA of 3.50 or higher in courses in the School of Nursing (courses with NS prefix).
4. Complete the following:
 - a. Obtain written support for the intent to graduate with honors from the faculty advisor.
 - b. Notify the chair of the baccalaureate program and the Baccalaureate Curriculum Committee in writing of the intent to graduate with honors prior to enrolling in the first semester of senior year classes.
 - c. Obtain approval to enroll in the honors electives from the baccalaureate chair and Baccalaureate Curriculum Committee prior to enrolling for first semester of senior year classes.

Licensure and/or Certification

Graduates of the Bachelor of Science in Nursing Science are eligible to sit for the National Council Licensure Examination (NCLEX-RN) from the National Council of State Boards of Nursing.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Student Learning Outcomes

Students graduating with a Bachelor of Science in Nursing Science will be able to:

- Demonstrate critical thinking by making evidence-based nursing judgments through the use of intellectual, interpersonal, and technical competencies to promote safe and effective client-centered care.
- Implement caring behaviors in the practice of professional nursing using established standards, evidence based practice, and innovation to prevent illness and promote and restore health in order to meet the changing needs of diverse individuals, families, groups, and communities.
- Utilize principles of management and leadership to collaborate as a member of the interprofessional care team by using a spirit of inquiry to direct clinical nursing practice.
- Compare and contrast roles of the professional nurse in promoting optimal healthcare and policies locally nationally, and globally.
- Develop an individual plan for ongoing professional development and professional identity.

Paramedical Technology

Matanuska-Susitna College (MSC)

8295 East College Drive (P.O. Box 2889), Palmer, AK 99645
 Contact Dane Wallace, (907) 746-9329 or dwallace6@alaska.edu

matsu.alaska.edu/degree-programs/paramedical-technology (<http://matsu.alaska.edu/degree-programs/paramedical-technology>)

Kenai Peninsula College (KPC), Kenai River Campus

156 College Road, Soldotna, AK 99669

Contact Paul Perry, (907) 262-0378 or toll-free (877) 262-0330 or peperry@alaska.edu

www.kpc.alaska.edu/academics/areas-of-study/paramedic (<http://www.kpc.alaska.edu/academics/areas-of-study/paramedic>)

Paramedics provide pre-hospital emergency care to acutely ill or injured patients under medical authority of licensed physicians. Individuals interested in pursuing a career as a paramedic should possess significant strength to lift and carry victims, good use of hands and fingers, good coordination, good judgment and emotional stability, as well as the ability to work confidently under pressure. Students successfully completing the degree requirements and the PMED courses meet the U.S. Department of Transportation National Standards for Paramedics and are eligible to take the National Registry examination required for licensure.

Two primary requirements of the Paramedical Technology program are clinical rotations and the Capstone Internship. Clinical rotations provide instruction and supervised practice of emergency medical skills in various units of hospitals and ambulances within the Kenai Peninsula, Anchorage, and Mat-Su borough areas throughout the program. The Capstone Internship provides experience in advanced life support ambulances at busy 911 EMS agencies across the "lower-48" contiguous United States after completion of classroom and clinical rotation program requirements. Student interns are the third member of the medical/rescue team and work under the direct supervision of a paramedic preceptor. Capstone Internship sites are arranged in various contiguous U.S. locations. Efforts are made to place students in geographic locations of their choice; however, intern positions may not be available at all approved sites. Length of internship varies depending on the call volume at the location and successful application of paramedic skills.

CAAHEP Accredited

The University of Alaska Anchorage paramedic program delivered at UAA's Matanuska-Susitna College is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) (<http://www.caahep.org>) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Commission on Accreditation of Allied Health Education Programs (CAAHEP)

25400 U.S. Highway 19 North, Suite 158
 Clearwater, FL 33763

www.caahep.org (<http://www.caahep.org>)

Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP)

8301 Lakeview Parkway, Suite 111-312

Rowlett TX 75088

(214) 703-8445

FAX (214) 703-8992

www.coaemsp.org (<http://www.coaemsp.org>)

CoAEMSP Letter of Review

The University of Alaska Anchorage paramedic program delivered at UAA's Kenai Peninsula College has been issued a Letter of Review by the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP Executive Office). This letter is NOT a CAAHEP accreditation status. It is a status signifying that a program seeking initial accreditation has demonstrated sufficient compliance with the accreditation Standards through the Letter of Review Self Study Report (LSSR) and other documentation. Letter of Review is recognized by the National Registry of Emergency Medical Technicians (NREMT) for eligibility to take the NREMT's Paramedic credentialing examination(s). However, it is NOT a guarantee of eventual accreditation.

To contact CoAEMSP Executive Office:
8301 Lakeview Parkway Suite 111-312
Rowlett, TX 75088
214-703-8445
FAX 214-703-8992
www.coaemsp.org (<http://www.coaemsp.org>)

Program of Study

Associate of Applied Science

- AAS in Paramedical Technology (p. 277)

Faculty

Dane Wallace, Coordinator/Assistant Professor (MSC),
dwallace6@alaska.edu
Paul Perry, Coordinator/Assistant Professor (KPC),
peperry@alaska.edu

Associate of Applied Science in Paramedical Technology

This program is delivered only through Kenai Peninsula College and Matanuska-Susitna College.

Licensure and/or Certification

Graduates of the Associate of Applied Science in Paramedical Technology Program are eligible to sit for the National Registry of EMT's Paramedic National Certification Examination. Upon successful completion of the National Registry paramedic examination, graduates of the Program are also eligible to apply for the State of Alaska Mobile Intensive Care (MICP) license.

Students successfully completing the State of Alaska ETT, EMT 1, EMT 2, or EMT 3 are eligible to test their completed level with the State of Alaska, Office of EMS.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Admission to the paramedical technology program is competitive and based on a ranking process. Program applications can be requested through the department or downloaded via the Internet. Application requirements must be completed prior to the May 15 application deadline.

Students should consider applying for admission as a pre-major in paramedical technology while enrolled in other paramedical technology degree prerequisite courses. While being a pre-major is not required, students may be eligible for financial aid since they will be considered a degree-seeking student. Students enrolled as paramedical technology pre-majors are still required to obtain a KPC or MSC campus-specific certificate of admission.

Admission as a paramedical technology pre-major does not guarantee admission to the paramedical technology degree program. Applications for the degree program that starts each fall must still be submitted by the May 15 deadline. Formal admission requirements to the Paramedical Technology AAS program are listed below.

1. Certificate of admission from the Office of Admissions, including transcripts from both high school/GED and college, with transcript evaluations (if any). Documentation from college transcripts must show successful completion of BIOL A111 and BIOL A112 with laboratories and grades of 2.00 (C) or above.
2. Student must attend an advising session with the KPC or MSC paramedical technology coordinator. Contact the campus for an appointment.
3. Paramedic Program Application and Confidential Required Information form sent to the paramedical technology coordinator:
 - a. Copy of current National Registry EMT-Basic or state of Alaska EMT-1 certificate
 - b. Evidence of current Healthcare Provider or equivalent, CPR Card
 - c. Copies of all current medical certifications or licenses
 - d. Military DD-214 (long form); if applicable
 - e. Complete BIOL A111, BIOL A112 (8 credits) with a minimum C grade.
 - f. Submit to the program coordinator the scores from the Nurse Entrance Test (NET). The test may be scheduled through the KPC, MSC or UAA testing centers
 - g. Resume with three letters of recommendation
 - h. Admissions essay
4. Upon completion of items 1-3, student files are ranked based on a point system. The top 20 (KPC) or 25 (MSC) applicants will be notified and invited for oral interviews by a selection committee. The top 15 (KPC) or 16 (MSC) will be accepted into the program. The remaining standby applicants will be ranked and offered a position should an accepted applicant decline admission. Please contact department for further details. Students will be contacted in June with the results.

Admission Requirements Before Beginning Coursework

Once admitted to the paramedical technology program, students are required to provide the following before beginning coursework:

1. Provide documentation from personal physician, PA-C, or NP affirming capability of performing the physical tasks as outlined by the DOT 1998 Paramedic Curriculum.
2. Evidence of:
 - a. Immunity to measles, rubella and mumps confirmed by titer;
 - b. Immunity to hepatitis A and hepatitis B, confirmed by titer (first semester clinical students may be in the process of completing the immunization series; for those students, documentation of immunity by titer is required prior to entry into PMED A295 course);
 - c. Immunity to chicken pox documented by history, titer or current immunization;
 - d. Diphtheria/tetanus vaccination within the past 10 years (with booster required at the time of expiration);
 - e. Freedom from active tuberculosis, documented annually by negative PPD skin test or by health examination by a nurse practitioner, physician, or physician's assistant;
 - f. Documentation of HIV testing annually (results not required to be submitted to KPC/MSU).
3. Healthcare Provider or equivalent CPR certificate must be kept current.
4. Professional liability insurance in the amount of \$1 million/\$3 million must be maintained throughout the duration of the student's enrollment in the paramedical technology program. The policy will be paid out of student lab fees.
5. Submit results of a state- and national-level criminal background check. Must be completed prior to the start of courses. This process can take several months to complete.
6. Document having been found free of illegal drugs. Tests must be taken and results submitted to the paramedical technology coordinator after being accepted into the program, and before the first day of class.

Students enrolled in clinical courses must provide their own transportation to clinical assignments and will be required to purchase uniforms and specialized equipment. The college assumes no responsibility for illnesses and injuries experienced by students in conjunction with their clinical experiences; students who are injured while completing clinical assignments are responsible for all associated medical costs. No workers compensation will be awarded if injured on a clinical site, or during the field internship. It is strongly recommended that students maintain personal medical insurance.

Advising

Advising for the Kenai Peninsula College program is only available from the paramedical technology faculty at KPC. Please call (907) 262-0378 for more information.

Advising for the Mat-Su College program is only available from the paramedical technology faculty at MSC. Please call (907) 746-9329 for more information.

Academic Requirements

- Students are required to earn a grade of 3.00 B or higher in each PMED course. Failure to maintain a passing grade of B will result in dismissal from the program.
- Students must complete all General Course Requirements (English, communications and math) before they register for or begin their ride-along internship (PMED A295).

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
Communication Requirements		
Oral Communication:		3
COMM A111	Fundamentals of Oral Communication (recommended)	
Written Communication:		6
WRTG A111	Writing Across Contexts (required)	
WRTG A212	Writing and the Professions (recommended)	
Natural Science Requirements		
BIOL A111	Human Anatomy and Physiology I *	4
BIOL A112	Human Anatomy and Physiology II *	4
Math Requirement		
MATH A105	Intermediate Algebra (or higher)	3
Program Requirements		
PMED A241	Paramedicine I	8
PMED A242	Clinical Rotation I	4
PMED A251	Paramedicine II	8
PMED A252	Clinical Rotation II	4
PMED A261	Paramedicine III	8
PMED A262	Clinical Rotation III	4
PMED A295	Paramedic Internship	12
Total Credits		68

* *BIOL A111 and BIOL A112 are prerequisites for admission into the paramedic program and also fulfill the AAS General Course Requirements.*

A total of 68 credits is required for the degree.

Program Student Learning Outcomes

The national DOT curriculum for paramedic training covers 14 learning outcomes and the MSC program follows that curriculum. The students and the program are assessed by an external review team (the National Registry) on each of those specific curriculum points.

National Highway Safety Traffic Association curriculum outcomes:

- **Preparatory** — Integrates comprehensive knowledge of EMS systems, safety/well-being of the paramedic, and medical/legal and ethical issues, which is intended to improve the health of EMS personnel, patients, and the community.
- **Anatomy and Physiology** — Integrates a complex depth and comprehensive breadth of knowledge of the anatomy and physiology of all human systems.
- **Medical Terminology** — Integrates comprehensive anatomical and medical terminology and abbreviations into the written and oral communication with colleagues and other health care professionals.
- **Pathophysiology** — Integrates comprehensive knowledge of pathophysiology of major human systems.
- **Life Span Development** — Integrates comprehensive knowledge of life span development.
- **Public Health** — Applies fundamental knowledge of principles of public health and epidemiology including public health emergencies, health promotion, and illness and injury prevention.
- **Pharmacology** — Integrates comprehensive knowledge of pharmacology to formulate a treatment plan intended to mitigate emergencies and improve the overall health of the patient.
- **Airway Management, Respiration and Artificial Ventilation** — Integrates complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of assuring a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.
- **Patient Assessment** — Integrates scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan.
- **Medicine** — Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient with a medical complaint.
- **Shock and Resuscitation** — Integrates comprehensive knowledge of causes and pathophysiology into the management of cardiac arrest and peri-arrest states. Integrates a comprehensive knowledge of the causes and pathophysiology into the management of shock, respiratory failure or arrest with an emphasis on early intervention to prevent arrest.
- **Trauma** — Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression to implement a comprehensive treatment/disposition plan for an acutely injured patient.
- **Special Patient Population** — Integrates assessment findings with principles of pathophysiology and knowledge of psychosocial needs

to formulate a field impression and implement a comprehensive treatment/disposition plan for patients with special needs.

- **EMS Operations** — Knowledge of operational roles and responsibilities to ensure safe patient, public, and personnel safety.

Pharmacy Technology

Allied Health Sciences Building (AHS), Room 148, (907) 786-6928
www.uaa.alaska.edu/alliedhealth/academics/pharmacytechnology
 (http://www.uaa.alaska.edu/alliedhealth/academics/pharmacytechnology)

Pharmacy technicians work in pharmacies under the direct supervision of a pharmacist. They help prepare prescriptions, sometimes measuring, mixing, packaging, labeling and delivering medications to patients. They order supplies and help to keep pharmacy equipment clean. Pharmacy technicians also help to maintain confidential drug and patient records. Graduates of this program will assist licensed pharmacists as they provide medications and other drug devices to patients.

Program of Study

Occupational Endorsement Certificate

- OEC in Pharmacy Technology (p. 279)

Occupational Endorsement Certificate in Pharmacy Technology

This program prepares students to work as pharmacy technicians. The program meets the outcomes of the Model Curriculum for Pharmacy Technician Training developed by the Accreditation Council for Pharmacy Education (ACPE). Upon successful completion of the certificate, students will be well-prepared to work in various settings as a pharmacy technician and to successfully sit for the national Pharmacy Technician Certification Board examination (PTCB). Students will also have a solid background, although it is not required, to continue further study in the field of pharmacy, pursuing a pre-pharmacy degree and ultimately a Doctor of Pharmacy degree.

This occupational endorsement is not contingent upon the student passing any type of external certification or licensure examination. Students should note that although this program has no age restrictions, the state of Alaska requires that all pharmacy technicians be at least 18 years of age prior to licensure.

All coursework associated with the program is offered exclusively in a distance-delivered, online learning format.

Admission Requirements

Satisfy the Application and Admission Requirements for Occupational Endorsement Certificate Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Occupational Endorsement Certificates (p. 82).

- Complete the Program Requirements below.
- Earn a grade of C or higher in all courses required for the OEC.

Program Requirements

Code	Title	Credits
PHAR A101	Introduction to Pharmacy	3
PHAR A105	Pharmacology for Technicians I	3
PHAR A107	Pharmacy Calculations	3
PHAR A111	Techniques of Pharmacy Practice	3
PHAR A115	Pharmacology for Technicians II	3
PHAR A192	Topics in Pharmacy	1
Total Credits		16

A total of 16 credits is required for this certificate.

Program Student Learning Outcomes

After completion of this program students will be able to:

- Receive, screen and prepare prescription/medication orders checking for completeness, authenticity and accuracy.
- Initiate, verify, assist in the adjudication of, and collect payment and/or initiate billing for pharmacy services and goods.
- Purchase and maintain inventory of medications, equipment and devices according to an established plan.
- Maintain pharmacy equipment and facilities.
- Participate in the process for preventing medication misadventures, notifying the pharmacist when a problem or situation requires his/her attention.
- Communicate clearly when speaking or writing while maintaining confidentiality, compassion, and an image of professionalism.

Physical Therapist Assistant

Professional Studies Building (PSB), Room 146, (907) 786-4769
www.uaa.alaska.edu/alliedhealth/academics/physicaltherapistassistant (<http://www.uaa.alaska.edu/alliedhealth/academics/physicaltherapistassistant>)

Program of Study

Associate of Applied Science

- AAS in Physical Therapist Assistant (p. 280)

Associate of Applied Science in Physical Therapist Assistant

Physical therapist assistants (PTAs) provide physical therapy services under the direction and supervision of a physical therapist. PTAs help people of all ages and help people who have movement difficulties due to injury or disease get back to doing the things in their lives that they want and need to do. Unlike a physical therapist, the PTA cannot evaluate a patient, but can provide vital and ongoing assessment and treatment interventions toward specific short- and long-term goals.

Care provided by a PTA may include therapies designed to improve mobility, strength or function; to relieve pain; to prevent or limit disability; and to promote overall wellness and fitness.

Generally, PTAs are employed wherever physical therapists work. Hospitals, rehabilitation centers, nursing homes, home and public health agencies, schools, private physical therapy practices, and the armed forces are major employers.

Admission Requirements

Admission to the Physical Therapist Assistant program is limited and is not guaranteed by admission to the pre-major or by completion of the program admission requirements below. Complete information about the application process is on the Physical Therapist Assistant Application Procedure website. (<https://www.uaa.alaska.edu/academics/college-of-health/departments/school-of-allied-health/academics/physical-therapist-assistant/applicationprocedure.cshhtml>)

To be considered for admission, students must:

- Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).
- Meet with the UAA Physical Therapist Assistant program advisor well in advance of the September 1 deadline regarding program admission requirements, as well as the application deadline and process.
- Complete the Physical Therapist Assistant program application form.
- Provide transcripts documenting successful completion of the following courses with a minimum grade of C, with the exception of BIOL A111 and A112 for which the student must have a minimum grade of B. (Courses may be in progress at the time of application.)

Code	Title	Credits
BIOL A111	Human Anatomy and Physiology I	4
BIOL A112	Human Anatomy and Physiology II	4
One of the following:		3
COMM A111	Fundamentals of Oral Communication	
COMM A235	Small Group Communication	
COMM A237	Interpersonal Communication	
COMM A241	Public Speaking	
WRTG A111	Writing Across Contexts	3
MA A101	Medical Terminology	3
MA A104	Essentials of Human Disease	3
PSY A111	Introduction to Psychology	3
or PSY A150	Lifespan Development	

- Complete thirty (30) hours of clinical observations and provide documentation using the Clinical Observation form.
- Provide three (3) recommendation letters by non-family members.
- Provide a copy of current Basic Life Support for Health Care Providers certification.

- Once admitted, provide evidence of current immunizations as requested by the department.
- Once admitted, and prior to program start, submit to a national-level criminal background check.

Advising

Special admission and application procedure requirements apply. Interested students should contact the Physical Therapist Assistant Department for selection criteria. Completion of admission requirements does not guarantee acceptance into the program. Due to the risks associated with working in a health care setting, students are required to have health insurance. Health insurance is available for purchase through the UAA Student Health and Counseling Center.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83) in oral and written communications (9 credits). In the Physical Therapist Assistant program, the General Course Requirement is fulfilled by completing BIOL A111 and BIOL A112.
- Complete the Program Requirements with a minimum grade of C or P.

Program Requirements

Code	Title	Credits
PTA A101	Fundamentals of Physical Therapy	2
PTA A105	Tests and Measures	3
PTA A110	Kinesiology and Biomechanics	3
PTA A120	Rehabilitation I	3
PTA A130	Physical Therapy Interventions I	4
PTA A150	Psychosocial Aspects of Health Care	2
PTA A195	Clinical Practicum I	1
PTA A210	Therapeutic Exercise	4
PTA A220	Rehabilitation II	3
PTA A230	Physical Therapy Interventions II	4
PTA A250	Neurological Interventions Across the Lifespan	3
PTA A292	Physical Therapist Assistant Seminar	2
PTA A295A	Clinical Practicum II	5
PTA A295B	Clinical Practicum III	5

A total of 61 credits is required for the degree.

Licensure and/or Certification

Graduates of the Associate of Applied Science in Physical Therapist Assistant are eligible to sit for the National Physical Therapy Exam administered by the Federation of State Boards of Physical Therapy.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Student Learning Outcomes

At the completion of the Physical Therapist Assistant program, students are able to:

1. Exhibit professional behavior in their role as responsible physical therapist assistants, adhering to appropriate ethical, legal and regulatory standards.
2. Engage in evidence-based practice, responding to the dynamics of a changing healthcare system.
3. Integrate the principles of the physical, biological and behavioral sciences with the clinical practice of physical therapy.
4. Communicate effectively and sensitively with patients, families and other members of the health care team.

Faculty

Terese Anderson, Term Assistant Professor, taanderson4@alaska.edu

LeeAnne Carrothers, Term Assistant

Professor, lcarrothers@alaska.edu

Radiologic Technology

Allied Health Science Building (AHS), Room 148, (907) 786-6929

www.uaa.alaska.edu/academics/college-of-health/departments/school-of-allied-health/academics/radiologic-technology (<https://www.uaa.alaska.edu/academics/college-of-health/departments/school-of-allied-health/academics/radiologic-technology/index.cshtml>)

Programs of Study

Occupational Endorsement Certificate

- OEC in Limited Radiology (p. 281)

Associate of Applied Science

- AAS in Radiologic Technology (p. 282)

Faculty

James Barr, Term Instructor, jmbarr@alaska.edu

Amanda Loy, Term Assistant Professor/Clinical Coordinator
ajloy@alaska.edu

Kathryn Slagle, Assistant Professor/Program
Director, kslagle@alaska.edu

Occupational Endorsement Certificate in Limited Radiology

Limited radiographers perform X-ray examinations within a limited scope and work under the direct supervision of a registered radiologic technologist, physician and physician's assistant. The limited radiographer is prepared with the technical skills to perform

examinations and provide the physician with diagnostic images of the skeletal system.

The occupational endorsement certificate is not contingent upon the student passing any type of external certification or licensure examination.

This certificate does not lead to the AAS in Radiologic Technology (p. 282).

Admission Requirements

- Satisfy the Application and Admission Requirements for Occupational Endorsement Certificate Programs (p. 53).
- Students must be at least 18 years or older.

Graduation Requirements

- Satisfy the General University Requirements for Occupational Endorsement Certificates (p. 82).
- Complete the Program Requirements below with a grade of C or higher in all required courses.

Program Requirements

Code	Title	Credits
RADT A101	Fundamentals for Limited Radiography I	3
RADT A102	Fundamentals for Limited Radiography II	3
RADT A103	Procedures for Limited Radiography I	3
RADT A104	Procedures for Limited Radiography II	2
Total Credits		11

A total of 11 credits is required for this certificate.

Program Student Learning Outcomes

This program prepares students to work as limited radiographers with knowledge of the curriculum content identified by the American Society of Radiologic Technologists (ASRT). After completion of this program the students will be able to demonstrate the following:

- Entry-level knowledge and skills for employment as a limited radiographer.
- Proficiency in the performance of limited radiographic procedures.
- Meet statewide staffing needs.

Associate of Applied Science in Radiologic Technology

The radiologic technology program prepares students for employment as career-entry medical radiographers. Students completing the program receive an Associate of Applied Science degree and are eligible to apply for certification with the American Registry of Radiologic Technologists (ARRT).

Graduates are prepared with the technical skills necessary to perform a variety of diagnostic radiographic examinations. The primary role of the radiographer is to provide diagnostic images of the structure and function of anatomy to assist the physician in the treatment of injury and disease. Examples of examinations performed include chest, upper and lower extremities, spine, ribs, skull, gastrointestinal, genitourinary, and reproductive systems.

The program of study incorporates didactic instruction, laboratory demonstration and clinical application in a manner that provides correlation of theory with practice. The inclusion of General University Requirements fulfills program goals of developing knowledgeable and competent practitioners who will have opportunities for continued professional growth. Additional expenses include clinical attire, vaccinations, identification badge, background check and other organization fees.

The AAS degree is not contingent upon the students passing any type of external certification or licensure examination.

Admissions Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Students will be admitted to the radiologic technology program as a pre-major. Prior to being admitted as a full major the student must complete the following additional admission requirements:

1. Submit Medical Imaging Sciences Department, Radiologic Technology application.
2. Earn a grade of C or better in BIOL A111, BIOL A112 and MA A101.
3. Current CPR (American Heart Association BLS) certification.
4. Evidence of current immunization to include the following:
 - a. Rubella and rubeola, confirmed by titer;
 - b. Immunity to hepatitis A and hepatitis B, confirmed by titer;
 - c. Immunity to chicken pox documented by history, titer, or current immunization;
 - d. Diphtheria/tetanus vaccination within the past 10 years (with booster required at the time of expiration);
 - e. Freedom from active tuberculosis, documented annually by negative PPD skin test or by health examination;
 - f. Documentation of HIV testing annually (results not required).
5. Provide criminal background check upon acceptance.

Advising

Students should contact the radiologic technology faculty for assistance with course planning toward the degree.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).

- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83) (WRTG A212 recommended).
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
MATH A105 or MATH A151	Intermediate Algebra * College Algebra for Calculus	3-4
Select one of the following:		3
PSY A111	Introduction to Psychology	
PSY A150	Lifespan Development	
PSY A153	Human Relations	
SOC A101	Introduction to Sociology	
Professional Course Requirements		
RADT A111	Introduction to Radiologic Technology and Patient Care	3
RADT A131	Radiographic Procedures I	3
RADT A132	Radiographic Procedures II	3
RADT A133	Radiographic Procedures III	3
RADT A151	Radiographic Physics	2
RADT A161	Fundamentals of Medical Imaging	3
RADT A171	Fundamentals of Medical Imaging II	3
RADT A195A	Radiography Practicum I	2
RADT A195B	Radiography Practicum II	6
RADT A211	Radiologic Pharmacology and Drug Administration	1
RADT A251	Radiobiology and Protection	2
RADT A272	Ethics and Quality Control in Medical Imaging	2
RADT A280	Medical Imaging Pathology	3
RADT A282	Current Issues in Radiologic Technology	1
RADT A295A	Radiography Practicum IV	5
RADT A295B	Radiography Practicum V	5

* Or any MATH course for which MATH A105 or MATH A151 is a prerequisite.

A total of 62 credits is required for the degree.

Program Student Learning Outcomes

This program prepares students to work as radiologic technologists with knowledge in the general education, the radiologic technology, and the curriculum content areas identified by the American Society of Radiologic Technology (ASRT). At the completion of this program, students will be able to:

- Demonstrate proficiency and competency in the performance of radiographic procedures utilizing proper exposure techniques.
- Apply entry-level knowledge and skills as a radiologic technologist.

- Demonstrate a professional attitude and proper ethical behavior in clinic settings.
- Utilize effective oral and written communication with patients, physicians, and other healthcare providers.

Social Work

Gordon Hartlieb Hall (GHH), Room 106, (907) 786-6900

www.uaa.alaska.edu/socialwork (<http://www.uaa.alaska.edu/socialwork>)

The educational purpose of the Bachelor of Social Work (BSW) program at the University of Alaska Anchorage is to prepare graduates for beginning professional social work practice. Preparation for professional practice builds on a broad-based liberal arts education accomplished through completion of the General Education and major degree requirements.

Social work is a profession committed to assisting individuals, families, groups, organizations, communities and society as a whole in the improvement of the quality of life through the amelioration of social problems, equitable distribution of social resources and client empowerment. Within an overall emphasis on consumer-centered planned change, the BSW program is guided by the following principles:

- Social work practice is based on selective use of knowledge in planned efforts with human systems and social problems.
- Social work practice recognizes human diversity as a strength.
- Social work practice is based on professional values and ethics.
- Social work practice is based on professional relationships.
- Social work practice is based on reciprocal role performance.
- Social work practice is based on a strengths perspective.

Social work education engages the student in carefully planned experiences to achieve the knowledge, skills and values necessary for beginning professional practice. These experiences take place in the classroom, laboratory, volunteer experience, small seminars and selected field work practicum placements. The practicum placement is an essential component for completion of the professional degree for the BSW.

The BSW program is accredited by the Council on Social Work Education (CSWE). BSW program admission and curriculum requirements are consistent with BSW licensing requirements for the state of Alaska.

Programs of Study

Bachelor of Social Work

- Bachelor of Social Work (p. 284)

Minor

- Minor in Social Welfare Studies (p. 286)

Faculty

Donna Aguiniga, Associate Professor, dmaquina@alaska.edu

Mary Dallas Allen, Associate Professor/MSW Program Coordinator,
mdallen@alaska.edu

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Alexa Filanowicz, Clinical Assistant Professor/BSW Field
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Stephanie Vaughn, Clinical Assistant Professor/MSW Field
Coordinator

Bachelor of Social Work

The mission of the UAA BSW program is to prepare generalist social workers who enhance human well-being and promote social and economic justice for people of all backgrounds, particularly those in Alaska.

Alaska's unique and rich multicultural populations, geographic remoteness and frontier status allow the real potential for skilled social work professionals to make a profound impact on social and economic injustice in our state.

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Declaration of social work as a major (resulting in pre-major status), does not guarantee admission to the social work program. Students typically begin by taking 100 and 200 level GER and social work courses.

Students typically apply for full admission to the social work program during the fall semester of the academic year (AY) prior to the AY they intend to enter practicum and graduate. The BSW program accepts applications for full admission to the BSW program only during the fall semester. Full admission to the social work program is based upon the requirements listed below.

Social work credits earned through other social work programs accredited through the Council on Social Work Education (CSWE) may be transferred to UAA and applied toward the Bachelor of Social Work. Approval from the UAA School of Social Work is required for acceptance of social work transfer credits.

Requirements for Full Admission to the Program

To apply for full admission to the Social Work program, students must have completed the following:

1. Earned a cumulative grade point average (GPA) of 2.50 or above
2. Completed with a grade of C or better or are currently enrolled in SWK A206 and SWK A330
3. Junior standing or have completed of at least 60 credit hours
4. Eligible for social work licensure
5. Demonstrated commitment to social work values and ethics

Students must submit the following application materials to the School of Social Work by the last Friday in October prior to intended entry into fieldwork:

1. A signed School of Social Work Application for Admission to the BSW degree and practicum for fall enrollment
2. Written admissions statement
3. Student practicum interest sheet
4. Social work faculty advisor approval to apply

The admission committee reserves the right to request additional information if necessary.

In addition to submission of application materials, each applicant participates in an admission interview conducted by the faculty to assess his or her academic and professional readiness to enter the social work program and participate in practicum. The School of Social Work will notify applicants of their admission status by December 20 of each year.

Admission to the social work program is based on the following criteria:

1. Meeting the aforementioned requirements
2. Beginning competence in client-centered communication and interviewing skills
3. Demonstration of professional behaviors and interactions with peers, faculty and staff
4. The professional judgment of social work faculty

Most students do not have all required courses completed at the time of application. In this event, the student may be admitted to the BSW program conditionally, and will be required to complete all junior-level and below courses with a grade of C or better prior to the fall semester in which they plan to enter practicum or their admission will be denied. Students who cannot obtain a course grade of C or better in two (2) attempts for any given social work course will be denied admission.

The UAA School of Social Work BSW degree program only accepts students who are eligible to receive Alaska state licensure. Please contact the School of Social Work for further information.

Academic Requirements

Students in the social work program must earn a grade of C or better in all required social work courses and liberal arts foundation requirements. Adherence to the Code of Ethics established by the National Association of Social Workers is required.

Field Practicum

Field practicum placements may become competitive if the number of applicants exceeds the number of practicum slots. The BSW program and field agencies reserve the right to refuse and/or terminate students who do not meet a minimum standard of performance. Thus, while the School of Social Work makes every effort to find appropriate field placements for students, admittance to the BSW program does not guarantee acceptance by cooperating social services agencies. The BSW program does not grant social work course credit for life experience or previous work experience.

Prior to entering field practicum, students must have completed the following:

1. General Education Requirements for baccalaureate degrees
2. Specified liberal arts foundation courses with a grade of C or better
3. The following social work courses with a grade of C or better (28 credits):

Code	Title	Credits
SWK A106	Introduction to Social Welfare	3
SWK A206	Introduction to Social Work	3
SWK A243	Cultural Diversity and Community Service Learning	3
SWK A330	Social Work Practice with Individuals	4
SWK A342	Human Behavior in the Social Environment	3
SWK A424	Social Work Research	3
SWK A430	Social Work Practice with Families and Groups	3
SWK A481	Case Management in Social Work Practice	3
SWK A482	Writing for Social Work Practice	3
Total Credits		28

Advising

General education, admission and major requirements listed here do not solely fulfill the 120 credit requirement for the degree. Students will need to complete additional electives to graduate. It is recommended that students take electives and degree requirements concurrently to graduate on time. For further questions, consult an advisor

Students are encouraged to meet with their assigned social work faculty academic advisor at least one time per semester.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the Major Requirements below. It is recommended that students take one or two 3-credit electives each semester to bring total credits to 120.

Major Requirements

Code	Title	Credits
Liberal Arts Foundation Courses		
ANTH A200	Alaska Native Cultures	3
or ANTH A202	Cultural Anthropology	
BA A151	Business Foundations	3
or ECON A201	Principles of Macroeconomics	
or ECON A202	Principles of Microeconomics	
BIOL A102	Introductory Biology	3-6

or BIOL A108	Principles and Methods in Biology	
or BIOL A111	Human Anatomy and Physiology I	
or BIOL A112	Human Anatomy and Physiology II	
ENGL A120	Critical Thinking	3
or PHIL A101	Introduction to Logic	
or PHIL A201	Introduction to Philosophy	
or PHIL A301	Ethics	
or PHIL A421	Philosophy of the Sciences	
PSY A150	Lifespan Development	3
SOC A101	Introduction to Sociology	3
Core Courses		
SWK A106	Introduction to Social Welfare	3
SWK A206	Introduction to Social Work	3
SWK A243	Cultural Diversity and Community Service Learning	3
SWK A330	Social Work Practice with Individuals	4
SWK A331	Social Work Practice with Organizations and Communities	3
SWK A342	Human Behavior in the Social Environment	3
SWK A406	Social Welfare: Policies and Issues	3
SWK A424	Social Work Research	3
SWK A429	Trauma and Crisis Intervention in Social Work Practice	3
SWK A430	Social Work Practice with Families and Groups	3
SWK A481	Case Management in Social Work Practice	3
SWK A482	Writing for Social Work Practice	3
SWK A495A	Social Work Practicum I	3
SWK A495B	Social Work Practicum II	3
Upper division Social Work electives		9

A total of 120 credits is required for the degree, of which 42 must be upper division.

Honors in Social Work

The Bachelor of Social Work program recognizes exceptional performance by conferring departmental honors in social work. In order to receive honors in social work, a student must meet the following requirements:

1. Submit an intent to graduate with honors application to the BSW Program Coordinator during the Spring of the junior year.
2. Complete all requirements for the BSW degree. A minimum of 30 credits applicable to the BSW degree must be completed at UAA.
3. Have a GPA of 3.75 or higher in upper division (300- and 400-level) social work courses.
4. Completion of:

Code	Title	Credits
SWK A498	Advanced Community-Based Research	3

5. One course in applied statistics with a grade of C or better.

Successful completion of departmental honors in social work in the UAA BSW program earns the right to waive a regular review of an admission packet to the foundation curriculum of the UAA Master of Social Work program. Students are responsible for completing a UAA Graduate Application for Admission and a program application for admission to the MSW program. The application packet should be submitted to the MSW Admissions Committee by the application deadline, with request to waive the regular review process. Admission to the full program will be granted if the applicant meets all of the requirements for departmental honors. Students interested in waiving the foundation curriculum must apply for advanced standing with a full review.

Program Student Learning Outcomes

Students graduating with a Bachelor of Social Work will be able to:

- Demonstrate ethical and professional behavior
- Engage diversity and difference in practice
- Advance human rights and social, economic, and environmental justice
- Engage in practice-informed research and research-informed practice
- Engage in policy practice
- Engage with individuals, families, groups, organizations, and communities
- Assess individuals, families, groups, organizations, and communities
- Intervene with individuals, families, groups, organizations, and communities
- Evaluate practice with individuals, families, groups, organizations, and communities

Minor in Social Welfare Studies

Students majoring in another subject who wish to minor in social welfare studies must complete the following requirements:

Code	Title	Credits
SWK A106	Introduction to Social Welfare	3
SWK A206	Introduction to Social Work	3
SWK A243	Cultural Diversity and Community Service Learning	3
SWK A342	Human Behavior in the Social Environment	3
SWK A406	Social Welfare: Policies and Issues	3
Upper-division SWK elective		3
Total Credits		18

A total of 18 credits is required for the minor.

Surgical Technology

(907) 786-6936

The AAS in Surgical Technology degree is designed to prepare competent entry-level surgical technologists in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

Surgical technologists are operating room specialists who perform specific duties for pre-, intra-, and postoperative case management. Surgical technologists must be knowledgeable in asepsis and sterile technique, and must be able to properly care for instrumentation, equipment and supplies. Surgical case management, wound care and closure, and surgical patient care and safety all fall within the realm of the surgical technologist's responsibilities.

Prior to a scheduled surgical procedure, the surgical technologist's duties include preparation of the operating room, gathering of supplies and equipment, case set-up, and preparation of the operative site with sterile drapes. During surgery, surgical technologists anticipate the needs of the surgeon, maintain the sterile field, pass instruments and medications to the surgeon and assistant, and apply wound dressings. Postoperative case management duties include care and maintenance of equipment and instruments after use, and preparation of the operating room for the next procedure.

Surgical technologists may be employed in hospital operating rooms, central sterile processing departments, outpatient surgical units, medical companies as sales representatives or in private physicians' practices.

Program of Study

Associate of Applied Science

- AAS in Surgical Technology (p. 286)

Faculty

Kristi Brooks, Term Assistant Professor, klbrooks3@alaska.edu

Associate of Applied Science in Surgical Technology

Admission Requirements

Satisfy the Application and Admission Requirements for the Associate Degree Programs.

Surgical Technology is a limited enrollment program due to limited clinical site availability and program accreditation requirements. Students compete to earn acceptance into this program and must complete the following steps prior to submitting an application to the department:

- Meet with the UAA Surgical Technology program advisor regarding application and program admission requirements prior to the application deadline.

- Place into MATH A105 or a higher MATH course, or complete MATH A055 with a minimum grade of C.
- Complete the following courses with a minimum grade of C in each course, and a combined GPA of 2.5 or higher in these courses.

Code	Title	Credits
BIOL A111 or BIOL A113	Human Anatomy and Physiology I Lectures in Human Anatomy and Physiology I	3-4
BIOL A112 or BIOL A114	Human Anatomy and Physiology II Lectures in Human Anatomy and Physiology II	3-4
BIOL A241 or BIOL A240	Lectures in Introductory Microbiology for Health Sciences Introductory Microbiology for Health Sciences	3-4
MA A101	Medical Terminology	3
MA A104	Essentials of Human Disease	3
WRTG A111	Writing Across Contexts	3

- Submit the Surgical Technology program application.

Students selected for the program will be required to submit the following items (specific information can be found on the School of Allied Health, Surgical Technology Program website):

1. A copy of current Basic Life Support (BLS) for Health Care Provider certification.
2. Evidence of current immunizations as requested by the department.
3. Evidence of health insurance coverage.
4. A national-level criminal background check and a drug-screening lab test.

Advising

Interested students should contact the Surgical Technology department in the School of Allied Health for information and deadlines regarding the program application and selection criteria. Completion of admission requirements does not guarantee acceptance into the program.

Academic Requirements

Students in the Surgical Technology AAS program must earn a satisfactory grade (C or higher or P) in all SURG courses in order to progress to the next semester. Students who do not meet this requirement will be notified and may submit a formal request to retake one course to attempt to earn a satisfactory grade; however, this will be possible only on a space available basis and by approval of the program faculty. The request will be considered in the context of the student's overall performance in the program. If space is not available, or if the request is denied, students may be removed from the program.

Graduation Requirements

1. Satisfy the General University Requirements for Associate of Applied Science Degrees.
2. Complete the General Course/Education Requirements for Associate of Applied Science Degrees in oral and written communications (9 credits). In the Surgical Technology program, the General Course Requirement is fulfilled by completing pre-requisite courses.
3. Complete the program requirements listed below with a minimum grade of C or P.

Program Requirements

Code	Title	Credits
BIOL A111 or BIOL A113	Human Anatomy and Physiology I Lectures in Human Anatomy and Physiology I	3-4
BIOL A112 or BIOL A114	Human Anatomy and Physiology II Lectures in Human Anatomy and Physiology II	3-4
BIOL A241 or BIOL A240	Lectures in Introductory Microbiology for Health Sciences Introductory Microbiology for Health Sciences	3-4
MA A101	Medical Terminology	3
MA A104	Essentials of Human Disease	3
PSY A111 or PSY A150 or SOC A101	Introduction to Psychology Lifespan Development Introduction to Sociology	3
SURG A150	Introduction to Surgical Technology	4
SURG A160	Fundamentals of Surgical Technology	8
SURG A210	Surgical Procedures I	6
SURG A220	Surgical Procedures II	6
SURG A292	Surgical Technology Seminar	1
SURG A295	Surgical Technology Practicum	11
Total Credits		54-57

A minimum of 63 credits is required for this degree.

Licensure and/or Certification

Graduates of the Associate of Applied Science in Surgical Technology are eligible to sit for the Certified Surgical Technologist examination from the National Board of Surgical Technology and Surgical Assisting.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

1. Apply knowledge and skills of biological sciences in the perioperative setting.

2. Communicate effectively with surgical team members, patients and their families
3. Apply the principles of aseptic technique in the perioperative setting
4. Organize routine instrumentation and supplies within the perioperative environment.
5. Demonstrate knowledge of pharmacology and math calculation principles related to the surgical environment
6. Collaborate with members of the surgical team to deliver quality patient care with consideration of the unique psychological and social needs of each patient
7. Demonstrate skills and behaviors necessary to function as a member of a surgical team

Community & Technical College

University Center (UC), Room 141, (907) 786-6400
www.uaa.alaska.edu/ctc (<http://www.uaa.alaska.edu/ctc>)

Overview

The mission of the UAA Community & Technical College (CTC) is to build Alaska's workforce and foster student success through quality education and technical training.

Degrees and Certificates

CTC offers bachelors and associates degree and certificate programs. Programs are organized into four divisions:

- Aviation Technology Division: air traffic control, aviation administration, aviation maintenance, aviation technology, professional piloting
- Building Technologies Division: computer and networking technology, construction management, occupational safety and health
- Culinary Arts & Hospitality Administration Division: culinary arts and hospitality administration
- Transportation & Power Division: automotive technology, diesel power technology, and welding and nondestructive testing technology (the division also supports several Community Campus programs such as Industrial Technology, Process Technology and Refrigeration & Heating)
- University Studies Division: apprenticeship technologies and applied technologies leadership (the division also houses the Learning Commons, the UAA Testing Center, and is host to Army ROTC and Air Force ROTC which house the National Defense, Strategic Studies and Leadership minor

Faculty within the college are highly trained professionals, many with years of experience in the technical specialties related to their teaching areas. Program advisory committees help ensure that certificate and degree programs are closely linked to the workforce needs of the

economy. Graduates of CTC programs generally find immediate employment in their chosen field.

Advising

Prospective students should call the Division listed below for advising and further information:

- Aviation Technology Division: (907) 786-7200
- Building Technologies Division: (907) 786-6465
- Culinary Arts & Hospitality Administration Division: (907) 786-1487
- Transportation & Power Division: (907) 786-1485
- University Studies Division: Army ROTC-(907) 786-6093, Air Force ROTC-(907) 786-7266, apprenticeship technologies and applied technologies leadership (907)786-6400

Preparatory and General Education Departments

CTC serves all UAA students through coursework in essential skills including Communication, Quantitative Studies, and Writing:

- The Communication Department offers 100 and 200 level courses that satisfy General Education requirements, plus a Communication minor. Oral communication skills courses increase the abilities of students to interact appropriately and effectively in a variety of contexts, including interpersonal, small group, and public speaking settings.
- The Quantitative Studies Department offers zero, 100 and 200 level courses, including those that satisfy General Education requirements. Courses are taught with the goal of making math accessible. Presentation is varied and may include flipped classes, discovery learning, or computer-based instruction using the Math Emporium model.
- The Writing Department offers zero, 100 and 200 level courses, including those that satisfy General Education requirements. Some support courses for grammar and vocabulary building are taught under the PRPE course prefix. The department uses placement and retention advising, learning communities and other high-impact practices, tutoring and a developmental teaching philosophy to help students succeed.

Air Force ROTC

Aviation Technology Complex (AVNC), Room 116
2811 Merrill Field Drive, Anchorage, AK 99501, (907) 786-7266
www.uaa.alaska.edu/afrotc (<http://www.uaa.alaska.edu/afrotc>)

The Air Force ROTC program educates and trains students to serve as officers in the active duty U.S. Air Force. Air Force ROTC has two-, three- and four-year programs that culminate in a commission as a second lieutenant in the Air Force. Academic curriculum includes studies in leadership and management, national security affairs, and the development of air and space power. Leadership laboratory consists of practical military training, physical fitness, leadership exercises and staff rides to local Air Force installations. Air Force ROTC is not a degree- or certificate-granting program. Academic courses (except AIRS A150) are open to all UAA students. Students who have joined

the Cadet Wing and do not have a medical condition that would preclude service in the Armed Forces may participate in AIRS A150.

The leadership laboratory provides practical military training. Activities include field trips to Air Force bases, physical fitness training, marching, and leadership exercises. To attend the leadership laboratory, UAA students must join the Cadet Wing and not have a medical condition that would preclude service in the Armed Forces.

To become an officer through Air Force ROTC, a student must, at a minimum, complete the two-year program (300- and 400-level courses plus leadership laboratory), a summer field training encampment, and earn a baccalaureate degree in any major from UAA. Upon graduation and commissioning, new lieutenants must serve a minimum of four years in the Air Force. Those who successfully complete Air Force pilot training must serve 10 years after training.

In order to receive a minor in National Defense, Strategic Studies and Leadership: Air Force Emphasis, students must complete the declaration of a minor form (https://www.uaa.alaska.edu/records/degree_Services/declaration_minor_form_login.cfm?CFID=34965222&CFTOKEN=97904871) on the UAA website.

Two hours of mandatory physical training (PT) are required each week. Times and location of PT sessions will be announced each term.

Two-Year Program

Available to UAA students with two years remaining until graduation. Cadets must take the courses listed below and attend a summer field training encampment either before starting the 300-level courses or in the summer prior to starting the 400-level courses.

Code	Title	Credits
AIRS A301	US Air Force Leadership and Communication I	3
AIRS A302	US Air Force Leadership and Communication II	3
AIRS A401	National Security Affairs I	3
AIRS A402	National Security Affairs II/Prep for Active Duty	3
AIRS A150	US Air Force Leadership Laboratory ¹	4

¹ Cadets take AIRS A150 each semester for a total of four semesters and 4 credits. Academic courses are taken in the order listed, beginning with AIRS A301 in the fall semester.

Three-Year Program

Available to UAA students with three years remaining until graduation. Cadets must take the courses listed below and attend a summer field training encampment prior to starting the 300-level courses.

Code	Title	Credits
AIRS A201	Team and Leadership Fundamentals I	2

AIRS A202	Team and Leadership Fundamentals II	2
AIRS A301	US Air Force Leadership and Communication I	3
AIRS A302	US Air Force Leadership and Communication II	3
AIRS A401	National Security Affairs I	3
AIRS A402	National Security Affairs II/Prep for Active Duty	3
AIRS A150	US Air Force Leadership Laboratory ¹	6

¹ Cadets take AIRS A150 each semester for a total of six semesters and 6 credits. Academic courses are taken in the order listed, beginning with AIRS A201 in the fall semester.

Four-Year Program

Available to UAA students with four or more years remaining until graduation. Cadets must take the courses listed below and attend a summer field training encampment prior to starting the 300-level courses.

Code	Title	Credits
AIRS A101	Heritage and Values of the United States Air Force	1
AIRS A102	Heritage and Values of the United States Air Force II	1
AIRS A201	Team and Leadership Fundamentals I	2
AIRS A202	Team and Leadership Fundamentals II	2
AIRS A301	US Air Force Leadership and Communication I	3
AIRS A302	US Air Force Leadership and Communication II	3
AIRS A401	National Security Affairs I	3
AIRS A402	National Security Affairs II/Prep for Active Duty	3
AIRS A150	US Air Force Leadership Laboratory ¹	8

¹ Cadets must take AIRS A150 each semester for a total of eight semesters and 8 credits. Academic courses are taken in the order listed, beginning with AIRS A101 in the fall semester.

Scholarships and Incentive Payments

Air Force ROTC has numerous scholarship and incentive programs for high school seniors planning to enroll at UAA and for college students currently enrolled or planning to enroll at UAA. All students receiving a scholarship or incentive payment must join the Cadet Wing and be a full-time student (at least 12 semester credits for undergraduate or 9 semester credits for graduate students).

1. High school seniors can compete for Air Force ROTC scholarships that pay tuition, fees, and books at any university with an Air Force ROTC program. The scholarship includes a monthly stipend. Students can submit applications to Air Force ROTC (<http://www.afrotc.com>). Applications must be postmarked no later than December 1 of a student's senior year.
2. Air Force ROTC at UAA has several scholarship options for college students. These scholarships cover tuition, fees, and books for sophomores, juniors, and seniors. Scholarships also include a monthly stipend. Students compete for these scholarships during the academic year prior to activation. For example, a 100-level cadet can compete for a scholarship that would start in the fall of the cadet's 200-level year.
3. All scholarships and incentives are subject to federally mandated age restrictions. Contact Air Force ROTC at UAA for more information.

Commissioning

After completing the AFROTC program, graduating from UAA and passing a commissioning physical, cadets will receive a commission as a second lieutenant in the US Air Force.

1. Cadets selected for pilot training will usually begin the training within one year of commissioning. Officers who successfully complete Air Force pilot training must serve 10 years. Cadets compete for pilot training slots in their 300-level year. The pilot selection board considers GPA, cadet ranking, Physical Fitness Test scores, previous flight time, and pilot aptitude test scores when assessing candidates. Air Force ROTC at UAA has more information on medical and age requirements for Air Force pilots.
2. Cadets not qualified for nor interested in pilot training can compete for slots in other career fields. The Air Force has a variety of operations, administrative, engineering and scientific career opportunities. Cadets compete for and receive career assignments during the 400-level year and will serve four years (minimum) in the US Air Force after commissioning.
3. Cadets may also compete for medical school appointments. Scholarships cover tuition, fees, and books for a cadet's undergraduate and medical school programs. Air Force ROTC at UAA has more information on this highly competitive program.

Program of Study

Minor

- Minor in National Defense, Strategic Studies and Leadership: Air Force Emphasis (p. 290)

Minor in National Defense, Strategic Studies and Leadership: Air Force Emphasis

Students majoring in another subject who wish to minor in national defense, strategic studies and leadership, Air Force focus, must complete the following requirements. Students must earn at least 6 credits in residence in this field. They must also earn a UAA cumulative

GPA of at least 3.00 (B). Students must complete the program's upper-division coursework in its entirety. Students must declare this minor using the declaration of a minor form (<https://www.uaa.alaska.edu/students/registrar/degree-services/declaration-minor-form-login.cshtml>) no later than the deadline to submit an application for graduation.

Air Force Program

Code	Title	Credits
Term 1		
AIRS A301	US Air Force Leadership and Communication I	3
AIRS A150	US Air Force Leadership Laboratory	1
Term 2		
AIRS A302	US Air Force Leadership and Communication II	3
AIRS A150	US Air Force Leadership Laboratory	1
Term 3		
AIRS A401	National Security Affairs I	3
AIRS A150	US Air Force Leadership Laboratory	1
Term 4		
AIRS A402	National Security Affairs II/Prep for Active Duty	3
AIRS A150	US Air Force Leadership Laboratory	1
May be taken during any term		
AIRS A201	Team and Leadership Fundamentals I	2
AIRS A202	Team and Leadership Fundamentals II	2
Total Credits		20

A minimum of 20 credits is required for the minor; 12 credits must be upper division.

Applied Technologies Leadership

Community and Technical College

Cuddy Center Room 110, (907) 786-1409

Applied Technologies Leadership

The BS ATL is a degree completion program for students who have earned 45 or more technical credits (such as an AAS or Undergraduate Certificate) from a regionally accredited institution. The degree offers technicians and professionals in a variety of fields the opportunity to prepare for leadership positions. Students complete General Education requirements, a common core, and a small number of upper division technical electives. The core courses are all available face-to-face or fully online.

Programs of Study

Bachelor of Science

- BS in Applied Technologies Leadership (p. 291)

Faculty

Darlene Gill, Term Assistant Professor, dlgill@alaska.edu

Tara Smith, Professor, tmsmith@alaska.edu

Bachelor of Science in Applied Technologies Leadership

The Bachelor of Science in Applied Technologies Leadership (BS ATL) provides a bachelor's degree completion option for students with an AAS or 45 technical credits in any field. Courses are offered via online and distance delivery to afford maximum flexibility for enrolled students.

The Bachelor of Science in Applied Technologies Leadership (BSATL) is a student-centered program that prepares students for leadership positions in technical fields. The program allows students to design a program of study that complements their technical proficiencies. Students entering the program come from many disciplines and have earned an Associate of Applied Science (AAS) degree (or a minimum of 45 related technical specialty credits) from a regionally accredited institution. This degree is appropriate for graduates of applied science and similar programs at other institutions, as well as a wide array of industrial technology professionals and military students with the required credits in their career field.

Students complete a common core of advanced professional, communication and quantitative skills and then work with a faculty advisor to design a meaningful study plan with upper-division coursework appropriate to advance in their discipline. Students use this coursework to explore and prepare for their future, collect artifacts from their experience, and synthesize their learning through a capstone experience and electronic portfolio.

Admission Requirements

- Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).
- Students who apply to the BSATL program must complete the following:
 - Mandatory advising session with a BSATL faculty advisor to develop an individual learning plan.
 - An AAS degree from a regionally accredited institution or equivalent credits in a technical specialty area as approved by a BSATL faculty advisor (45 credits minimum).

Advising

All students are required to meet with their faculty advisor each semester to review their academic progress and plan future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the major requirements below.

Major Requirements

- Students must work with a faculty advisor to design a learning plan focused on upper-division courses that complement their technical specialty and professional goals. These courses should focus on specialized knowledge required for advancement in a student's field or acquiring a broader knowledge base of a particular skill.
- Complete the following courses with a minimum grade of C.

Code	Title	Credits
BA A300	Organizational Theory and Behavior	3
BA A361	Human Resource Management	3
JPC A362	Principles of Strategic Communications	3
TECH A302	Organizational Safety and Health	3
TECH A305	Applied Leadership for Technicians	3
TECH A433	Project Design, Implementation and Control	3
Choose one of the following:		3
BA A388	Globalization and Business Environment	
PHIL A303	Environmental Ethics	
PHIL A304	Business Ethics	
PHIL A305	Professional Ethics	
Choose one of the following:		3-4
BA A273	Introduction to Statistics for Business and Economics	
STAT A200	Elementary Statistics	
STAT A253	Applied Statistics for the Sciences	
Complete 18 credits of upper-division, advisor-approved business, industry or general support courses		18
Capstone:		
TECH A453	Capstone Project	3
Total Credits		45-46

A minimum of 120 advisor-approved credits is required for the degree, of which a minimum of 42 credits must be upper division.

Program Student Learning Outcomes

Upon completion of the Bachelor of Science in Applied Technologies Leadership program, graduates will be able to:

1. Integrate appropriate strategic communication tools and techniques in a wide variety of business contexts

2. Apply appropriate management tools and techniques to manage various types of projects
3. Apply accepted leadership and management practices to promote ethical behavior and sustainable quality performance in organizations
4. Develop policies and procedures to ensure a safe, healthy, and environmentally sound workplace
5. Develop strategies to support an organization's vision, mission and capabilities while motivating and leading internal and external constituents

Apprenticeship Technologies

Cuddy Center Room 110, (907) 786-1409

The Apprenticeship Technologies program is a 60-credit Associate of Applied Science degree that integrates an apprenticeship field with relevant academic coursework. The curriculum specifically reflects the commitment of the university to provide high-quality instruction, engagement, and service to Alaska's diverse peoples by integrating academic studies with training for career and technical occupations.

Individuals receiving this degree must complete a formal apprenticeship program and hold journey-worker level status in occupations recognized by the U.S. Department of Labor, Office of Apprenticeship. Students declaring a major in Apprenticeship Technologies must present documentation of acceptance into a registered apprenticeship program approved by the U.S. Department of Labor, Office of Apprenticeship. The department will review the documentation and may recommend up to 38 credits be transcribed following successful completion of the apprenticeship. Students are encouraged to begin courses while participating in the apprenticeship program in consultation with the faculty mentor. Students who complete this program will be eligible to enroll in the Bachelor of Science, Applied Technology Leadership program at UAA or other appropriate degree programs.

Program of Study

Associate of Applied Science

- AAS in Apprenticeship Technologies (p. 292)

Faculty

Tara Smith, Professor, Community & Technical College,
tmsmith@alaska.edu (calecompte@alaska.edu)

Associate of Applied Science in Apprenticeship Technologies

Admission Requirements

1. Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).
2. Present documentation of acceptance into a registered apprenticeship program approved by the U.S. Department of Labor, Office of Apprenticeship.

Advising

Students should contact the Apprenticeship Technologies Coordinator or an academic advisor for assistance with course planning toward the Associate of Applied Science degree.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees. (p. 83)
- Complete the General Course Requirements for Associate of Applied Science Degrees. (p. 83)
- Develop and maintain an e-portfolio documenting related "On the Job Training" (OJT), progress of apprenticeship including hours and attainment of program learning outcomes.
- Complete the Program Requirements below.

Program Requirements

Code	Title	Credits
Complete any 100-level or higher undergraduate MATH or STAT course.		1-5
CEL A292	Introduction to Civic Engagement	3
CIS A105	Introduction to Personal Computers and Application Software *	3
Complete one of the following:		3
BA A151	Business Foundations	
BA A231	Fundamentals of Supervision	
PSY A153	Human Relations	
Successful completion of approved apprenticeship program. **		
Electives to complete a minimum of 60 credits of advisor-approved courses linked to an identified education or career pathway as needed.		
Total Credits		10-14

* Or any higher-level CIS course.

** Up to 38 technical credits from the approved apprenticeship will apply towards the AAS in Apprenticeship Technology program.

A minimum of 60 credits is required for the degree.

Program Student Learning Outcomes

At the completion of this program, students will be able to:

- Demonstrate effective communication skills needed in the workplace.
- Articulate how their academic coursework complements their knowledge and skills in their chosen field.
- Demonstrate entry-level knowledge and skills for technical applications related to their chosen field.

Architectural and Engineering Technology

Admission to all Architectural and Engineering Technology programs is currently suspended. Contact the Community & Technical College at (907) 786-6400 for more information.

Programs of Study

Occupational Endorsement Certificate

- OEC in CAD for Building Construction (p. 293)

Undergraduate Certificates

- Certificate in Architectural Technology (p. 293)
- Certificate in Civil Technology (p. 293)
- Certificate in Mechanical and Electrical Technology (p. 293)
- Certificate in Structural Technology (p. 293)

Associate of Applied Science

- AAS in Architectural and Engineering Technology (p. 293)

Faculty

Brian Bennett, Professor, bebennett@alaska.edu

Occupational Endorsement Certificate in CAD for Building Construction

Admission to this program is currently suspended. Contact the Community & Technical College at (907) 786-6400 for more information.

Undergraduate Certificate in Architectural Technology

Admission to this program is currently suspended. Contact the Community & Technical College at (907) 786-6400 for more information.

Undergraduate Certificate in Civil Technology

Admission to this program is currently suspended. Contact the Community & Technical College at (907) 786-6400 for more information.

Undergraduate Certificate in Mechanical and Electrical Technology

Admission to this program is currently suspended. Contact the Community & Technical College at (907) 786-6400 for more information.

Undergraduate Certificate in Structural Technology

Admission to this program is currently suspended. Contact the Community & Technical College at (907) 786-6400 for more information.

Associate of Applied Science in Architectural and Engineering Technology

Admission to this program is currently suspended. Contact the Community & Technical College at (907) 786-6400 for more information.

Army ROTC

Eugene Short Hall (ESH), Room 211, (907) 786-6094
www.uaa.alaska.edu/armyrotc (<http://www.uaa.alaska.edu/armyrotc>)

The Army Reserve Officers' Training Corps (ROTC) Program is America's primary officer training program. Army ROTC, in a cooperative effort by the United States Army and UAA, educates, trains and prepares students to serve as officers in the Regular Army, Army Reserve or Army National Guard. Army ROTC has two-, three- and four-year programs that lead to a commission as a second lieutenant. Army ROTC is divided into a basic course of study for freshmen and sophomores and the advanced course of study for juniors and seniors. Programs and courses can be adjusted to meet specific needs of individual students who desire to enroll but are past their freshman year. Prior to completing Army ROTC, students may receive a minor in National Defense, Strategic Studies and Leadership: Army Emphasis. The courses focus on military history, Army force structure, leadership, time and stress management, decision making through academic instruction, and operations in the contemporary operating environment. Non-contracted students may take the 100- and 200-level academic courses without incurring a military obligation. However, only contracted cadets may take MILS A302, MILS A401 and MILS A402.

The leadership and physical training laboratory provides practical military training. Activities include staff rides to Army bases, physical fitness training, conducting drill and ceremony, and leadership exercises. To attend the leadership laboratory, UAA students must not have a medical condition that would preclude service in the Armed Forces.

To become an officer through Army ROTC, a student must, at a minimum, complete the two-year program (300- and 400-level courses

plus leadership laboratory), the U.S. Army Leader Development and Assessment Course, and earn a baccalaureate degree in any major from UAA. Upon graduation and commissioning, new lieutenants must serve eight years in the regular Army, Army Reserves, and/or Army National Guard.

In order to receive a minor in National Defense, Strategic Studies, and Leadership: Army Emphasis, students must complete the declaration of a minor form (http://www.uaa.alaska.edu/records/graduation/declaration_minor_form_login.cfm) on the UAA website.

Three hours of mandatory Physical Training (PT) and a two-hour leadership lab are required each week. Times and location of PT sessions to be announced.

Two-Year Program

Available to UAA students with two years remaining until graduation: students complete the U.S. Army Leader's Training Course, the U.S. Army Leader Development and Assessment Course, and the following courses (19 credits):

Code	Title	Credits
MILS A150	Army ROTC Leadership and Physical Training Laboratory ¹	4
MILS A301	Training Management and the Warfighting Functions	3
MILS A302	Applied Leadership In Small Unit Operations	3
MILS A401	The Army Officer	3
MILS A402	Company Grade Leadership	3
MILS A450	History of the United States Army	3
Total Credits		19

¹ Students take MILS A150 each semester for a total of four semesters and 4 credits. Academic courses are taken in the order listed, beginning with MILS A301 in the fall semester. MILS A450 may be taken at any time throughout the program.

Three-Year Program

Available to UAA students with three years remaining until graduation: students complete the U.S. Army Leader Development and Assessment Course and the following courses (27 credits):

Code	Title	Credits
MILS A150	Army ROTC Leadership and Physical Training Laboratory ¹	6
MILS A201	Leadership and Decision Making	3
MILS A202	Army Doctrine and Team Development	3
MILS A301	Training Management and the Warfighting Functions	3
MILS A302	Applied Leadership In Small Unit Operations	3
MILS A401	The Army Officer	3
MILS A402	Company Grade Leadership	3

MILS A450	History of the United States Army	3
Total Credits		27

¹ Students take MILS A150 each semester for a total of six semesters and 6 credits. Academic courses are taken in the order listed, beginning with MILS A201 in the fall semester. MILS A450 may be taken at any time throughout the program.

Four-Year Program

Available to UAA students with four years remaining until graduation: students complete the U.S. Army Leader Development and Assessment Course and the following courses (31 credits):

Code	Title	Credits
MILS A101	Introduction to the Army and Critical Thinking	1
MILS A102	Introduction to the Profession of Arms	1
MILS A150	Army ROTC Leadership and Physical Training Laboratory (1)	8
MILS A201	Leadership and Decision Making	3
MILS A202	Army Doctrine and Team Development	3
MILS A301	Training Management and the Warfighting Functions	3
MILS A302	Applied Leadership In Small Unit Operations	3
MILS A401	The Army Officer	3
MILS A402	Company Grade Leadership	3
MILS A450	History of the United States Army	3
Total Credits		31

¹ Students take MILS A150 each semester for a total of eight semesters and 8 credits. Academic courses are taken in the order listed, beginning with MILS A201 in the fall semester. MILS A450 may be taken at any time throughout the program.

Scholarships and Incentive Payments

Army ROTC has numerous scholarship and incentive programs for high school seniors planning to enroll at UAA and for college students currently enrolled or planning to enroll at UAA. All students receiving a scholarship or incentive payment must be a full-time student (at least 12 semester credits for undergraduate or 9 semester credits for graduate students).

1. High school seniors can compete for Army ROTC scholarships that pay tuition, fees, and books at any university with an Army ROTC program. The scholarship includes a monthly stipend. Students can obtain applications on the Army ROTC website (<http://www.goarmy.com/rotc/scholarships.html>). Army ROTC at UAA has several scholarship options for college students. These scholarships cover tuition, fees, and books for both undergraduate and graduate students. Scholarships also include a monthly stipend. Students compete for these scholarships during

the academic term prior to activation. For example, a fall 100-level student can compete for a scholarship that would start in the spring of the student's 100-level year.

2. All scholarships and incentives are subject to federally mandated age restrictions.

Commissioning

After completing the Army ROTC program, graduating from UAA, and passing a commissioning physical, cadets will receive a commission as a second lieutenant in the United States Army.

1. Second lieutenants will usually begin their Basic Officer Leaders Course within one year of commissioning. Students compete nationally for their branch based on a combined score consisting of their GPA, on-campus evaluations, and Leader Development and Assessment Course evaluation. The United States Army has 16 branches with multiple careers in each one. Students receive the branch assignments during the 400-level year.
2. Students may also compete for medical and law school appointments. Scholarships cover tuition, fees, and books for a student's undergraduate and medical school programs. Army ROTC at UAA has more information on this highly competitive program.
3. Second lieutenants incur an eight-year service commitment with the Army. Select Cadets may choose to serve part time in the Army Reserve or Army National Guard while pursuing a civilian career.

Programs of Study

Minor

- Minor in National Defense, Strategic Studies and Leadership: Army Emphasis (p. 295)

Faculty

Captain Chad Ausel, Assistant Professor of Military Science,
ceausel@alaska.edu

Lieutenant Colonel Ryan Gillogly, Professor of Military Science/Chair,
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Minor in National Defense, Strategic Studies and Leadership: Army Emphasis

Contracted cadets majoring in another subject who wish to minor in national defense, strategic studies and leadership, Army emphasis, must complete the following requirements. Students must earn at least 3 credits in residence in this field. They must also earn a UAA cumulative GPA of at least 3.00 (B). Students must declare this minor using the declaration of a minor form (https://www.uaa.alaska.edu/records/degree_Services/declaration_minor_form_login.cfm) no later than the deadline to submit an application for graduation.

Code	Title	Credits
Term 1		
MILS A150	Army ROTC Leadership and Physical Training Laboratory	1
MILS A301	Training Management and the Warfighting Functions	3
Term 2		
MILS A150	Army ROTC Leadership and Physical Training Laboratory	1
MILS A302	Applied Leadership In Small Unit Operations	3
Term 3		
MILS A150	Army ROTC Leadership and Physical Training Laboratory	1
MILS A401	The Army Officer	3
Term 4		
MILS A150	Army ROTC Leadership and Physical Training Laboratory	1
MILS A402	Company Grade Leadership	3
May be taken during any term		
MILS A450	History of the United States Army	3
Total Credits		19

A minimum of 19 credits is required for the minor; 12 credits must be upper division.

Automotive and Diesel Technology

Auto Diesel Technology Building (ADT), Room 207, (907) 786-1485
www.uaa.alaska.edu/transportation (<http://www.uaa.alaska.edu/transportation>)

State and federal departments of labor projections show an above average increase in the need for qualified maintenance and repair technicians in the automotive and heavy-duty transportation, construction, and power generation industries. Consumer demands for increased performance and fuel economy, coupled with government regulations on vehicle emissions, are driving rapid developments in technology. The Transportation and Power Division offers AAS degrees in automotive technology and in diesel power technology that are designed to equip students with knowledge and skills necessary to meet the needs of employers in the industry. Both the AAS degrees and undergraduate certificate programs are accredited by the National Automotive Technicians Education Foundation (NATEF).

There are two options for the AAS in Automotive Technology. The general automotive technology option for the AAS and undergraduate certificate are designed to prepare students for a career in the automotive maintenance and repair industry. Curriculum design is based on automotive task lists developed by NATEF. The General Motors ASEP option for the AAS degree is designed to prepare students for a career in General Motors dealerships, AC Delco service facilities and various fleet repair centers. Students train on current technology vehicles and components donated by General Motors Corporation. Graduates from the corporate-sponsored AAS degree option receive

factory credentials upon graduation. These credentials are recognized by the respective dealerships across the country. Students are prepared and encouraged to take the appropriate ASE certification exams during their enrollment in both programs. There is also a registered apprenticeship program option for select students in the general automotive technology program.

The AAS and Undergraduate Certificate in Diesel Power Technology are designed to prepare students to work as repair and maintenance technicians in the heavy-duty transportation, construction and power generation industries. Much of the curriculum is based on medium- and heavy-duty maintenance and repair task lists developed by NATEF. Students train on vehicles, equipment and components provided by or procured from major manufacturers of medium- and heavy-duty trucks and equipment.

Programs of Study

Undergraduate Certificates

- Certificate in Automotive Technology (p. 296)
- Certificate in Diesel Power Technology (p. 297)

Associates of Applied Science

- AAS in Automotive Technology (p. 298)
- AAS in Diesel Power Technology (p. 299)

Faculty

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Undergraduate Certificate in Automotive Technology

The Undergraduate Certificate in Automotive Technology provides students with the technical education and training necessary to be successful in today's automotive industry. Students will study the various vehicle systems, including electrical and electronics, computerized engine controls, and the numerous mechanical components that make up today's complex vehicles.

Admission Requirements

Satisfy the Application and Admission Requirements for Undergraduate Certificate Programs (p. 53).

Advising

Students should consult the ADT faculty for assistance in curriculum planning toward the undergraduate certificate.

Computer Competency Requirement

The Automotive Technology certificate requires demonstrated computer competency. Computer competency may be demonstrated in any of the following ways:

- A 3-credit course in a computer language or an introductory course in data processing or microcomputers.
- Work-related experience verifying computer competency as approved by the faculty advisor.
- Self-initiated computer competency as approved by the faculty advisor.

Graduation Requirements

- Satisfy the General University Requirements for Undergraduate Certificates (p. 82).
- Complete the Program Requirements below.

Program Requirements

Code	Title	Credits
First Semester		
ADT A102	Introduction to Automotive Technology	3
ADT A121	Basic Electrical Systems	3
ADT A131	Auto Electrical II	3
ADT A150	Brake Systems	4
ADT A195	Automotive Practicum I	2
Second Semester		
ADT A122	Engine Theory and Diagnosis	3
ADT A160	Manual Drive Trains and Axles	4
ADT A162	Suspension and Alignment	4
ADT A195	Automotive Practicum I	2
Third Semester		
ADT A140	Automotive Engine Repair	3
ADT A225	Mobile Heating, Ventilation and Air Conditioning Systems	3
ADT A227	Auto Electrical III	3
ADT A195	Automotive Practicum I	2
Fourth Semester		
ADT A202	Auto Fuel and Emissions Systems	4
ADT A222	Automotive Engine Performance	3
ADT A260	Electronic and Automatic Transmissions	3
or ADT A295	Automotive Practicum II	
Total Credits		49

A total of 49 credits is required for the undergraduate certificate.

Program Student Learning Outcomes

At the completion of this undergraduate certificate program, students are able to:

- Demonstrate technical knowledge and skills necessary for success in the automotive maintenance and repair industry.
- Demonstrate academic proficiency necessary to pass national examinations.

- Demonstrate proficiency in performing occupationally related tasks in a professional setting.
- Integrate knowledge from diverse areas to develop effective diagnostic and repair strategies involving complex systems.
- Demonstrate effective oral and written communication skills necessary for success in the workplace.

Undergraduate Certificate in Diesel Power Technology

The Diesel Power Technology Undergraduate Certificate is designed to teach students the skills needed to be successful as technicians in the medium- and heavy-duty truck and equipment service industry. The undergraduate certificate may be completed in three semesters, which includes one summer semester of practicum. Laboratory experiences are performed on equipment and components currently used in the heavy-duty transportation, construction and power generation industries.

Career opportunities for graduates include manufacturer-specific service centers and independent repair and maintenance facilities. Students in the diesel power technology program can find employment within fleet service centers, construction equipment repair, maritime and mining industries, trucking and transportation, aviation ground support, and the seafood processing industry. Employers require technicians to be drug free and physically fit, and to have a current vehicle operator's license with a good driving record. Equal opportunities are available for men and women.

This undergraduate certificate program prepares students to understand the theory and operation of various systems and components associated with the medium- and heavy-duty diesel industry. Students develop the necessary skills for overhauling diesel engines and other major components through a combination of lecture and hands on training. The program also includes courses that focus on medium- and heavy-duty drive trains, braking systems (electric, pneumatic and hydraulic), suspension, steering, electrical/electronic systems, mobile hydraulics, and heating and air conditioning systems that are related to medium- and heavy-duty applications.

Admission Requirements

- Satisfy the Application and Admission Requirements for Undergraduate Certificate Programs (p. 53).
- Complete the following admission requirements:
 - Submit UAA Undergraduate Application for Admission for the Diesel Power Technology Undergraduate Certificate.
 - Document placement at the MATH A055 entry level or higher and at the WRTG A090 entry level or higher. For testing schedule, contact Testing Center at (907) 786-4500.

Advising

All students must meet with an academic advisor in the Auto/Diesel Technology (ADT) department prior to beginning any program of study and are encouraged to meet each semester for the purpose of reviewing their academic progress and planning future courses. It is particularly

important for students to meet with their advisor whenever academic difficulties arise. Degree check sheets are available in the ADT office.

See the ADT advisor for appropriate sequence of courses.

Note: If you plan on getting a Commercial Drivers License (CDL), it is advisable to check fitness for a CDL physical.

Graduation Requirements

- Satisfy the General University Requirements for Undergraduate Certificates (p. 82).
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
ADT A102	Introduction to Automotive Technology	3
ADT A121	Basic Electrical Systems	3
ADT A131	Auto Electrical II	3
ADT A153	Medium/Heavy-Duty Diesel Engines	4
ADT A155	Heavy-Duty Brake Systems	4
ADT A156	Heavy-Duty Maintenance and Inspection	3
ADT A195	Automotive Practicum I	3
ADT A225	Mobile Heating, Ventilation and Air Conditioning Systems	3
ADT A268	Mobile Hydraulic Systems	4
ADT A269	Heavy-Duty Drive Trains	3
WELD A101 or WELD A112	Gas and Arc Welding Shielded Metal Arc Welding (SMAW)	3
Total Credits		36

A total of 36 credits is required for the undergraduate certificate.

Program Student Learning Outcomes

At the completion of this undergraduate certificate program, students are able to:

- Demonstrate technical knowledge and critical thinking necessary for success in the heavy-duty diesel maintenance and repair industry.
- Demonstrate academic proficiency necessary to pass national examinations within the domain.
- Demonstrate proficiency in performing occupationally related tasks in a professional setting.
- Integrate knowledge from diverse areas to develop effective diagnostic and repair strategies involving complex systems.
- Demonstrate effective employability skills, including oral and written communication skills, as required by the 2014 accreditation standards for the National Automotive Technicians Education Foundation.

Associate of Applied Science in Automotive Technology

The Associate of Applied Science in Automotive Technology provides students with the technical education and training necessary to be successful in today's automotive industry. Students will study the various vehicle systems, including electrical and electronics and computerized engine controls, along with the numerous mechanical components that make up today's complex vehicles. The academic requirements of the program provide students with fundamental skills to enhance their written and oral communication skills. These courses also provide a foundation for continued studies should students decide to further their education or training.

These programs are modeled after a variety of very successful corporate training programs. Each program is four semesters long. The programs incorporate a prearranged, supervised, evaluated practicum in each of the first three semesters, with the possibility of an additional practicum during the last semester. Many students also choose to complete a summer practicum while enrolled in the program. In addition, there is a registered apprenticeship opportunity available for select students.

Students experience training on a wide variety of modern domestic and imported vehicles, light trucks, and vans. Laboratory and shop objectives are met on training vehicles, components and live shop projects. Automotive technology graduates have been placed in dealerships, independent shops, service stations, mass merchandisers, aviation ground support and fleet repair facilities. Employers require a current vehicle operator's license and a good driving record. The student should have physical capabilities required of the trade which typically include standing long hours; lifting heavy objects; contacting hazardous materials; operating machinery; exposure to noise, heat, cold, vapors, and other workplace hazards; manipulating tools; and working with small parts in confined and awkward positions.

Technicians must be able to distinguish colors in minimal light, transcribe numbers up to 17 digits, and work up to 10 hours a day, six days per week. Equal opportunities are available for men and women.

The program is offered with two options: General Automotive and General Motors ASEP. Each option has different admissions requirements based on the policies of the program sponsors.

Students admitted to the program in any option complete the same courses with the exception of their final semester. Students in the general automotive option may complete either ADT A260 or ADT A295. Students in the General Motors ASEP option must complete both ADT A260 and ADT A295.

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

General Automotive Option

Specific admission requirements apply to this option. See department for criteria.

General Motors ASEP Option

The GMASEP (Automotive Student Education Program) option for the Automotive Technology AAS degree is a joint venture with General Motors Company and its sponsoring General Motors dealerships. Admission to GMASEP is only in even-numbered years and has specific admission requirements. Please contact the GMASEP advisor, the department or sponsoring dealership for details. Students enrolled in this option attend class for the first 10 weeks of the semester and paid work experience the balance of the semester. General Education Requirement courses (English, Communications, etc.) are conducted on a condensed semester format by special arrangement through the College of Arts and Sciences.

Applicants must complete the following procedures:

- Instructor approval is required for admission to the GMASEP option. Prospective students should provide the UAA GMASEP instructor with a resume and a copy of their driving record.
- Admission to GMASEP requires employment by a sponsoring Alaska General Motors dealership or authorized repair facility.
- Apply for admission to UAA and to the UAA GMASEP program by contacting the Automotive and Diesel Technology Department at 3211 Providence Drive, Anchorage, AK 99508 or (907) 786-1485.
- Have official high school transcripts, or official GED, and any vocational-technical training certificates sent to the UAA Office of Admissions, 3211 Providence Drive, Anchorage, AK 99508.
- Present evidence to UAA GMASEP of math competency equivalent to completion of MATH A055. This may be accomplished by presentation of college transcripts for department evaluation, or by achieving an appropriate score on a UAA-approved placement test administered by the Testing Center. Call (907) 786-4500 to make testing arrangements.
- Demonstrate English language proficiency through appropriate score on a UAA-approved placement test administered by Advising and Testing or through presentation of transcripts for Department of English evaluation. Generally, applicants prepared for entry into WRTG A111 have sufficient proficiency for entry into the UAA GMASEP.

Advising

Students should consult the ADT faculty for assistance in curriculum planning toward the Associate of Applied Science.

Computer Competency Requirement

The AAS in Automotive Technology requires demonstrated computer competency. Computer competency may be demonstrated in any of the following ways:

- A 3-credit course in a computer language or an introductory course in data processing or microcomputers.
- Work-related experience verifying computer competency as approved by the faculty advisor.
- Self-initiated computer competency as approved by the faculty advisor.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the Program Requirements below.

Program Requirements

Code	Title	Credits
First Semester		
ADT A102	Introduction to Automotive Technology	3
ADT A121	Basic Electrical Systems	3
ADT A131	Auto Electrical II	3
ADT A150	Brake Systems	4
ADT A195	Automotive Practicum I	2
One AAS General Course Requirement		3
Second Semester		
ADT A122	Engine Theory and Diagnosis	3
ADT A160	Manual Drive Trains and Axles	4
ADT A162	Suspension and Alignment	4
ADT A195	Automotive Practicum I	2
One AAS General Course Requirement		3
Third Semester		
ADT A140	Automotive Engine Repair	3
ADT A225	Mobile Heating, Ventilation and Air Conditioning Systems	3
ADT A227	Auto Electrical III	3
ADT A195	Automotive Practicum I	2
One AAS General Course Requirement		3
Fourth Semester		
ADT A202	Auto Fuel and Emissions Systems	4
ADT A222	Automotive Engine Performance	3
ADT A260	Electronic and Automatic Transmissions *	3
or ADT A295	Automotive Practicum II	
Two AAS General Course Requirements		6
Total Credits		64

* Students admitted to the ASSET or the ASEP options must complete both ADT A260 and ADT A295.

A minimum of 64 credits is required for the degree.

Program Student Learning Outcomes

At the completion of this Associate of Applied Science degree program, students are able to:

- Demonstrate technical knowledge and skills necessary for success in the automotive maintenance and repair industry.

- Demonstrate academic proficiency necessary to pass national examinations.
- Demonstrate proficiency in performing occupationally related tasks in a professional setting.
- Integrate knowledge from diverse areas to develop effective diagnostic and repair strategies involving complex systems.
- Demonstrate effective oral and written communication skills necessary for success in the workplace.

Associate of Applied Science in Diesel Power Technology

The AAS in Diesel Power Technology is designed to teach students the skills needed to be successful as technicians in the medium- and heavy-duty truck and equipment service industry. The AAS may be completed in four semesters, which includes one summer semester of practicum. Laboratory experiences are performed on equipment and components currently used in the heavy-duty transportation, construction and power generation industries.

Career opportunities for graduates include manufacturer and independent repair and maintenance shops, fleets, construction, mining, aviation ground support, and the seafood processing industry. Employers require technicians to be drug free and physically fit, and to have a current vehicle operator's license with a good driving record. Equal opportunities are available for men and women.

This AAS program prepares students to understand the theory of, diagnose, and repair diesel engines, as well as medium- and heavy-duty drive trains, pneumatic and hydraulic brake systems, suspension steering, electrical/electronic systems, and heating and air conditioning systems on medium- and heavy-duty vehicle applications.

Admission Requirements

- Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).
- Complete the following admission requirements:
 - Submit UAA Undergraduate Application for Admission for the Diesel Power Technology Associate of Applied Science Degree.
 - Document placement at the MATH A055 entry level or higher and at the WRTG A090 entry level or higher. For testing schedule, contact Testing Center at (907) 786-45 ([http://catalog.uaa.alaska.edu/undergraduateprograms/ctc/automotiveanddieseltechnology/aas-heavydutytransportationequipment/tel:\(907\)%20786-4500](http://catalog.uaa.alaska.edu/undergraduateprograms/ctc/automotiveanddieseltechnology/aas-heavydutytransportationequipment/tel:(907)%20786-4500))25.
- Demonstrate computer competency using one of the following methods:
 - A course in computers (see faculty advisor for approved courses).
 - Documented work experience verifying computer competency as approved by the faculty advisor.
 - Demonstrated competency in computers as approved by the faculty advisor.

Advising

Students will consult the ADT faculty for assistance in curriculum planning toward the degree.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83) (15 credits).
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
ADT A102	Introduction to Automotive Technology	3
ADT A121	Basic Electrical Systems	3
ADT A131	Auto Electrical II	3
ADT A152	Heavy-Duty Suspension and Steering	4
ADT A153	Medium/Heavy-Duty Diesel Engines	4
ADT A155	Heavy-Duty Brake Systems	4
ADT A156	Heavy-Duty Maintenance and Inspection	3
ADT A195 or ADT A295	Automotive Practicum I Automotive Practicum II	3
ADT A225	Mobile Heating, Ventilation and Air Conditioning Systems	3
ADT A227	Auto Electrical III	3
ADT A267	Heavy-Duty Diesel Engine Performance	4
ADT A268	Mobile Hydraulic Systems	4
ADT A269	Heavy-Duty Drive Trains	3
WELD A101 or WELD A112	Gas and Arc Welding Shielded Metal Arc Welding (SMAW)	3
Total Credits		47

A total of 63 credits is required for the AAS degree.

Program Student Learning Outcomes

At the completion of this program, students are able to:

- Demonstrate academic proficiency necessary to pass national examinations within the domain.
- Demonstrate proficiency in performing occupationally related tasks in a professional setting.
- Integrate knowledge from diverse areas to develop effective diagnostic and repair strategies involving complex systems.
- Request, collect, summarize, evaluate, and apply oral and written information gathered from technical (e.g. schematics, technical

bulletins, and service information) and nontechnical (e.g. customer oral and written reports) sources regarding symptoms and potential diagnostic and repair strategies for diesel powered equipment.

- Apply knowledge gained from previous education and experience to problem solving to aid in diagnosis and repair for the immediate situation.
- Demonstrate effective employability skills, including oral and written communication skills, as required by the 2014 accreditation standards for the National Automotive Technicians Education Foundation.
- Demonstrate technical knowledge and critical thinking necessary for success in the heavy-duty maintenance and repair industry.

Aviation Technology

Aviation Technology Complex (AVNC), 2811 Merrill Field Drive, Anchorage, AK 99501, (907) 786-7200

www.uaa.alaska.edu/aviation (<http://www.uaa.alaska.edu/aviation>)

The Aviation Technology Division (ATD) is a component of the University of Alaska Anchorage Community & Technical College and is located at the Aviation Technology Complex on Merrill Field Airport, approximately two miles north of the UAA main campus. The mission of the ATD is to enhance, promote and provide quality aviation education, research and service worldwide. Individuals employed in the aviation industry desiring to update skills and knowledge may take selected courses; these individuals must contact the ATD office about prerequisites and other lab or course requirements. The ATD supplies graduates for skilled and professional aviation-related positions through four academic programs of study:

The **Air Traffic Control (ATC) program** provides enhanced career opportunities for graduates, preparing students for careers in air traffic in both the private and public sectors. It is one of 36 ATC programs in colleges and universities nationwide approved by the Federal Aviation Administration as a participant in the Collegiate Training Initiative (CTI).

The **Aviation Administration/Management program** prepares students for various administration and management positions within the aviation industry. The AAS degree in Aviation Administration provides an introduction to administrative duties and requirements as well as the skills necessary to provide entry-level administrative support, while the BSAT with the Aviation Management emphasis is designed to prepare graduates for management positions in all aspects of the aviation industry. Students acquire a comprehensive understanding of the interrelatedness of all elements of the air transportation system, as well as skill sets and competencies to enter and succeed in managing the unique operational and management requirements of airlines, airports, and general aviation support operations.

The **Aviation Maintenance Technology (AMT) program** is approved under Federal Aviation Regulation Part 147 and is a nationally recognized course of study designed to prepare graduates for entry into

positions as maintenance technicians in general aviation, corporate aviation, airlines, or aerospace manufacturers. In addition to traditional aircraft maintenance courses, the curriculum emphasizes modern aircraft systems including electronics, composite structures, automatic controls and turbine engines.

The ATD offers two Aviation Maintenance Undergraduate Certificates, one with an Airframe and the other with a Powerplant emphasis. The FAA approved AMT undergraduate certificate programs provide all of the required content to prepare students to achieve FAA certification as Aircraft Mechanics with Airframe and/or Powerplant ratings. Upon completion of the UAA undergraduate certificate programs, students may take written, oral and practical tests that are administered by FAA designees. Those who achieve passing scores on these tests are awarded the Aircraft Mechanic Certificate with appropriate rating(s) by the FAA.

After earning either undergraduate certificate, additional study allows a student to earn an Associate of Applied Science (AAS) degree in Aviation Maintenance Technology.

The **Professional Piloting program** prepares graduates for piloting careers in professional aviation. The Aviation Technology Division offers both associate (AAS Professional Piloting) and bachelor's (BSAT, with Professional Piloting emphasis) degrees. The UAA professional pilot training program is certificated by the FAA under Part 141 of the Federal Aviation Regulations. Both ground and airborne flight training are provided utilizing FAA approved curricula. UAA has fully-equipped flight training airplanes, advanced aircrew training devices (AATD) and a level B flight simulator to enhance the educational experience of the students. The FAA has authorized UAA to certify its professional piloting graduates as eligible for an Airline Transport Pilot Certificate with reduced aeronautical experience.

The **Aviation Minor** allows those students pursuing degrees other than aviation the opportunity to minor in Aviation Technology.

Programs of Study

Undergraduate Certificates

- Certificate in Aviation Maintenance Technology, Airframe (p. 301)
- Certificate in Aviation Maintenance Technology, Powerplant (p. 302)

Associates of Applied Science

- AAS in Air Traffic Control (p. 303)
- AAS in Aviation Administration (p. 305)
- AAS in Aviation Maintenance Technology (p. 306)
- AAS in Professional Piloting (p. 307)

Bachelor of Science

- BS in Aviation Technology (p. 309)

Minors

- Minor in Air Traffic Control (p. 312)
- Minor in Aviation Technology (p. 312)

Faculty

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Undergraduate Certificate in Aviation Maintenance Technology, Airframe

The Undergraduate Certificate in Aviation Maintenance Technology (AMT), Airframe, is designed to prepare graduates for employment as maintenance technicians in general aviation, corporate aviation, airlines or aerospace manufacturers. In addition to traditional aircraft maintenance courses, the curriculum emphasizes modern aircraft systems.

Admission Requirements

- Satisfy the Application and Admission Requirements for Undergraduate Certificate Programs (p. 53).
- Apply for admission to the AMT Airframe program by contacting the Aviation Technology Division (ATD) at 2811 Merrill Field Drive in Anchorage, calling (907) 786-7200 or visiting www.uaa.alaska.edu/aviation (<http://www.uaa.alaska.edu/aviation>).
- Present evidence of a proficiency in mathematics at or exceeding the MATH A055 level. An appropriate score on a math placement test may be used.
- Demonstrate English language proficiency through placement into WRTG A110 (or higher), ACT English scores, SAT Critical Reading scores or an appropriate score on the UAA-approved English placement exam. Generally, applicants eligible for entry into WRTG A110 have sufficient proficiency for entry into the AMT program.

Advising

All students must meet with an ATD academic advisor prior to beginning any program of study and are encouraged to meet each semester for the purpose of reviewing their academic progress and planning future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise. Degree check sheets are available in the ATD office. See the ATD advisor for appropriate sequence of courses.

Successful progress through the AMT program requires that all students have algebra proficiency at the MATH A055 level (MATH A105 is highly recommended) and English proficiency at the WRTG A110 level. Preparatory mathematics and English courses should be taken

prior to entry into the AMT program. Under certain circumstances mathematics and English courses may be taken during the first semester with some AMT courses; see an advisor before registering. The AMT program courses are sequential and students are cautioned that taking courses out of sequence will extend the program beyond its normal length. Typically, AMT courses have prerequisites, and advisor approval is required prior to registration for all AMT courses.

Graduation Requirements

- Satisfy the General University Requirements for Undergraduate Certificates (p. 82).
- Complete the Program Requirements below.

Program Requirements

Code	Title	Credits
AMT A170	Aircraft Ground Operations and Safety	1
AMT A171	Basic Aerodynamics	3
AMT A172	Aircraft Publications, Regulations and Records	3
AMT A174 & A174L	Fundamentals of Aircraft Electronics and Fundamentals of Aircraft Electronics Lab	5
AMT A175	Drawing and Precision Measurement	2
AMT A176	Aircraft Materials and Processes I	2
AMT A181 & A181L	Aircraft Fuel Systems and Aircraft Fuel Systems Lab	4
AMT A185 & A185L	Aircraft Sheetmetal Structures and Aircraft Sheetmetal Structures Lab	5
AMT A186	Aircraft Non-Destructive Inspection Methods	3
AMT A272	Aircraft Electrical Hardware and Systems	3
AMT A273 & A273L	Aircraft Fluid Power Systems and Aircraft Fluid Power Systems Lab	4
AMT A274 & A274L	Aircraft Electronic Systems and Aircraft Electronic Systems Lab	6
AMT A283 & A283L	Aircraft Auxiliary Systems and Aircraft Auxiliary Systems Lab	4
AMT A285 & A285L	Aircraft Bonded Structures and Aircraft Bonded Structures Lab	5
AMT A286	Aircraft Materials and Processes II	2
AMT A364	Aircraft Avionics Systems	3

AMT A369 & A369L	Airframe Assembly and Inspections and Airframe Assembly and Inspections Lab	5
Total Credits		60

A total of 60 credits is required for the undergraduate certificate.

Licensure and/or Certification

Graduates of the Undergraduate Certificate in Aviation Maintenance Technology, Airframe are eligible to sit for the Federal Aviation Administration (FAA) national certification examination(s).

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Student Learning Outcomes

At the completion of this program, students will be able to:

- Demonstrate proficient, entry-level aviation maintenance skills.
- Demonstrate proficiency in airframe maintenance skills.
- Demonstrate knowledge of aircraft structures and systems, and appropriate FAA regulations.
- Demonstrate knowledge of industry information: current status, segments and opportunities.

Undergraduate Certificate in Aviation Maintenance Technology, Powerplant

The Undergraduate Certificate in Aviation Maintenance Technology (AMT), Powerplant, is designed to prepare graduates for employment as maintenance technicians in general aviation, corporate aviation, airlines or aerospace manufacturers. In addition to traditional aircraft maintenance courses, the curriculum emphasizes modern aircraft systems.

Admission Requirements

- Satisfy the Application and Admission Requirements for Undergraduate Certificate Programs (p. 53).
- Apply for admission to the AMT Powerplant program by contacting the Aviation Technology Division (ATD) at 2811 Merrill Field Drive in Anchorage, calling (907) 786-7200 or visiting www.uaa.alaska.edu/aviation (<http://www.uaa.alaska.edu/aviation>).
- Present evidence of proficiency in mathematics at or exceeding the MATH A055 level. An appropriate score on a math placement test may be used.
- Demonstrate English language proficiency through placement into WRTG A110 or a higher level with an appropriate level on ACT English scores, SAT Verbal scores, or an English placement exam. Generally, applicants eligible for entry into WRTG A110 level have sufficient proficiency for entry into the AMT programs.

Advising

All students must meet with an ATD academic advisor prior to beginning any program of study and are encouraged to meet each semester for the purpose of reviewing their academic progress and planning future courses and schedules. It is particularly important for students to meet with their advisor whenever academic difficulties arise. Degree check sheets are available in the ATD office. See the ATD advisor for appropriate sequence of courses.

Successful progress through the AMT program requires that all students have algebra and English proficiency. Preparatory mathematics and English courses should be taken prior to entry into the AMT program. Under certain circumstances preparatory courses may be taken during the first semester with some AMT courses. The AMT program courses are sequential and the student is cautioned that taking courses out of sequence will extend the program beyond its normal length. Typically, AMT courses have prerequisites, and advisor approval is required prior to registration for all AMT courses.

Graduation Requirements

- Satisfy the General University Requirements for Undergraduate Certificates (p. 82).
- Complete the Program Requirements below.

Program Requirements

The courses listed below are scheduled in established blocks to meet course prerequisites. Mixing courses from a different semester series may result in significantly extending the completion of the certificate, as most courses are offered once a year.

Code	Title	Credits
AMT A170	Aircraft Ground Operations and Safety	1
AMT A171	Basic Aerodynamics	3
AMT A172	Aircraft Publications, Regulations and Records	3
AMT A174 & A174L	Fundamentals of Aircraft Electronics and Fundamentals of Aircraft Electronics Lab	5
AMT A175	Drawing and Precision Measurement	2
AMT A176	Aircraft Materials and Processes I	2
AMT A177	Reciprocating Engine Theory	2
AMT A178	Turbine Engine Theory	2
AMT A181 & A181L	Aircraft Fuel Systems and Aircraft Fuel Systems Lab	4
AMT A186	Aircraft Non-Destructive Inspection Methods	3
AMT A187 & A187L	Aircraft Reciprocating Engine Overhaul and Aircraft Reciprocating Engine Overhaul Lab	5

AMT A272	Aircraft Electrical Hardware and Systems	3
AMT A274 & A274L	Aircraft Electronic Systems and Aircraft Electronic Systems Lab	6
AMT A279 & A279L	Aircraft Turbine Engine Repair and Overhaul and Aircraft Turbine Engine Repair and Overhaul Lab	4
AMT A282	Aircraft Propeller Systems	1
AMT A284 & A284L	Aircraft Electrical Machinery and Aircraft Electrical Machinery Lab	4
AMT A287 & A287L	Reciprocating Engine Installation and Operation and Reciprocating Engine Installation and Operation Lab	5
AMT A289 & A289L	Turbine Engine Installation and Operation and Turbine Engine Installation and Operation Lab	5
Total Credits		60

A total of 60 credits is required for the AMT Powerplant Undergraduate Certificate.

Licensure and/or Certification

Graduates of the Undergraduate Certificate in Aviation Maintenance Technology, Powerplant are eligible to sit for the Federal Aviation Administration (FAA) national certification examination(s).

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Student Learning Outcomes

At the completion of this program, graduates will be able to:

1. Demonstrate proficiency in entry-level aviation maintenance skills.
2. Demonstrate proficiency in the required powerplant maintenance skills.
3. Demonstrate knowledge of aircraft powerplants, systems and appropriate FAA regulations.
4. Demonstrate knowledge of industry information: current status, trends, segments and opportunities.

Associate of Applied Science in Air Traffic Control

Air traffic control professionals utilize knowledge of aircraft operating limitations and performance, weather and atmospheric processes, radar theory and radar systems, federal regulations, the U.S. air traffic control system, as well as navigation methods within the National Airspace System. The AAS degree prepares students for the technical

requirements of the air traffic control profession and for entry into the Federal Aviation Administration (FAA) Academy. Additionally, the AAS prepares students to take the flight dispatcher exam, which is the entry-level requirement for jobs in the flight dispatcher career field.

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Special Considerations

UAA has no restrictions on age or physical condition of students. However, students desiring employment with the Federal Aviation Administration (FAA) should be aware of employment requirements:

- Medical Certificate is required as depicted in FAR 65.49 and 67 Subpart C.
- Thirty-year-old maximum age restriction for students anticipating employment in terminal or enroute options.
- For employment considerations with the FAA, students must receive a PASS score on the Air Traffic-Selection and Training (ATSAT) examination administered by the FAA. The examination provides a systematic process for continued enhancement of air traffic selection and training by testing candidates for recognition and cognitive skills required in the air traffic specialty and to identify the “composite controller.”

Advising

All students must meet with an academic advisor in the Aviation Technology Division (ATD) prior to beginning any program of study and are encouraged to meet each semester for the purpose of reviewing their academic progress and planning future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise. Degree check sheets are available in the ATD office.

See the ATD advisor for appropriate sequence of courses.

FAA Recommendation for Employment

1. To be eligible for FAA employment, student must achieve a C or better in all air traffic control-specific courses:

Code	Title	Credits
ATC A143	ATC Regulations	3
ATC A144	ATC Flight Procedures	3
ATC A147	Air Traffic Communications	3
ATC A241	Control Tower Operations	3
ATC A241L	Control Tower Operations Lab	1
ATC A242	ATC Terminal Radar Procedures	3
ATC A242L	ATC Terminal Radar Procedures Lab	1
ATC A243	ATC Enroute Procedures	3
ATC A243L	ATC Enroute Procedures Lab	1

2. In order to advance to 200-level ATC classes (ATC A241, ATC A241L, ATC A242, ATC A242L, ATC A243, ATC A243L), students must have a C or better in:

Code	Title	Credits
ATC A143	ATC Regulations	3
ATC A144	ATC Flight Procedures	3
ATC A147	Air Traffic Communications	3

3. Students may repeat ATC A143, ATC A144, and ATC A147 only once due to performance.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83). WRTG A212 is recommended. Any English course used to satisfy the humanities General Course Requirement must be different from the written communications requirement and have a course number higher than WRTG A111.
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
ATA A133 or ATA A134	Aviation Law and Regulations Principles of Aviation Administration	3
ATA A233	Aviation Safety	3
ATC A143	ATC Regulations	3
ATC A144	ATC Flight Procedures	3
ATC A147	Air Traffic Communications	3
ATC A241	Control Tower Operations	3
ATC A241L	Control Tower Operations Lab	1
ATC A242	ATC Terminal Radar Procedures	3
ATC A242L	ATC Terminal Radar Procedures Lab	1
ATC A243	ATC Enroute Procedures	3
ATC A243L	ATC Enroute Procedures Lab	1
ATC A325	Tools for Weather Briefing	3
ATC A440	Facility Operation and Administration	3
ATP A100	Private Pilot Ground School	3
ATP A235	Elements of Weather	3
ATP A251	Flight Dispatcher Overview	3
ATP A351	Flight Dispatcher Operations	3
WRTG A212	Writing and the Professions	3
GER Natural Science		3
Select one of the following: *		3-4
MATH A105	Intermediate Algebra	
MATH A121	College Algebra for Managerial and Social Sciences	
MATH A151	College Algebra for Calculus	
MATH A152	Trigonometry	
MATH A221	Applied Calculus for Managerial and Social Sciences	

MATH A251	Calculus I	
Select one of the following not already taken:		3
ATA A133	Aviation Law and Regulations	
ATA A134	Principles of Aviation Administration	
ATA A331	Human Factors in Aviation	
ATA A335	Airport Operations	
ATA A336	Air Service Operations	
ATA A337	Airline Operations	
ATA A425	Civil Aviation Security	
ATA A431	Aircraft Accident Investigation	
ATA A490	Advanced Topics in Aviation Technology	
ATP A116	Instrument Ground School	
ATP A200	Commercial Ground School	
ATP A231	Search, Survival, and Rescue	
ATP A232	Advanced Aviation Navigation	
Total Credits		57-58

* May be used to fulfill the AAS General Course Requirements.

A total of 63 credits is required for the degree.

Program Student Learning Outcomes

At the completion of this program, students will be able to:

1. Demonstrate knowledge of aircraft operating limitations and performance, including methods of air and ground navigation within the National Airspace System.
2. Demonstrate knowledge of weather and atmospheric processes and how weather phenomena affect aviation operations.
3. Demonstrate knowledge of the relationship between federal regulations, FAA publications, and the U.S. air traffic control system.
4. Demonstrate knowledge of fundamentals of aircraft separation in radar, nonradar, and terminal environments, as well as operating techniques of ATC facilities in visual and instrument conditions.

Associate of Applied Science in Aviation Administration

Aviation administrators require knowledge of aircraft operating limitations and performance, weather and atmospheric processes, federal regulations, and airport operations. The AAS in Aviation Administration provides an introduction to administrative duties and requirements as well as the skills necessary to provide administrative support.

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Advising

All students must meet with an academic advisor in the Aviation Technology Division (ATD) prior to beginning any program of study and are encouraged to meet each semester for the purpose of reviewing their academic progress and planning future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise. Degree check sheets are available in the ATD Office.

See the ATD advisor for appropriate sequence of courses.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
ACCT A201	Principles of Financial Accounting	3
ATA A102	Introduction to Aviation Technology	3
ATA A133	Aviation Law and Regulations	3
ATA A134	Principles of Aviation Administration	3
ATA A233	Aviation Safety	3
ATA A331	Human Factors in Aviation	3
ATA A335	Airport Operations	3
ATA A337	Airline Operations	3
ATP A100	Private Pilot Ground School	3
BA A151	Business Foundations	3
BA A231	Fundamentals of Supervision	3
ECON A201	Principles of Macroeconomics	3
PHIL A301	Ethics	3
PHYS A123	College Physics I	3
PHYS A123L	College Physics I Laboratory	1
WRTG A111	Writing Across Contexts	3
or WRTG A1W		
WRTG A212	Writing and the Professions	3
or WRTG A2W		
Select one of the following:		3-4
MATH A121	College Algebra for Managerial and Social Sciences	
MATH A151	College Algebra for Calculus	
MATH A152	Trigonometry	
MATH A221	Applied Calculus for Managerial and Social Sciences	
MATH A251	Calculus I	
STAT A200	Elementary Statistics	
Oral Communication Tier 1 GER		3

Elective Courses 100-400-level	6
Total Credits	61-62

A total of 61-62 credits is required for the degree.

Program Student Learning Outcomes

At the completion of this program, students will be able to:

1. Demonstrate technical knowledge of aircraft operating limitations and performance.
2. Demonstrate knowledge of aviation law and regulations, and of the legal issues affecting the aviation industry.
3. Demonstrate knowledge of the issues affecting aviation safety and safety management.
4. Demonstrate knowledge of basic business management skills and supervisory techniques.

Associate of Applied Science in Aviation Maintenance Technology

The Associate of Applied Science in Aviation Maintenance is designed to prepare graduates for employment as maintenance technicians in general aviation, corporate aviation, airlines or aerospace manufacturers. In addition to traditional aircraft maintenance courses, the curriculum emphasizes modern aircraft systems.

Admission Requirements

- Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).
- Apply for admission to the AMT program by contacting the Aviation Technology Division (ATD) at 2811 Merrill Field Drive in Anchorage, calling (907) 786-7200 or visiting www.uaa.alaska.edu/aviation (<http://www.uaa.alaska.edu/aviation>).

Advising

All students must meet with an ATD academic advisor prior to beginning any program of study and are encouraged to meet each semester for the purpose of reviewing their academic progress and planning future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise. Degree check sheets are available in the ATD office. See the ATD advisor for appropriate sequence of courses.

The AAS normally requires one semester of study beyond a certificate program. AMT students may elect to continue their studies while pursuing a Bachelor of Science in Aviation Technology or Bachelor of Science in Technology at UAA. Those intending to pursue a four-year degree must discuss their plans with an AMT faculty advisor for proper course sequence.

AAS degree candidates who have completed an FAA approved program in aviation maintenance at a nationally or regionally accredited institution, passed all courses in the major with a grade of C or better, and currently hold a valid FAA Mechanic's Certificate may, with the approval of the department, use the certificate for a portion of the AAS

major degree requirements. Individuals considering this option must discuss their plans with an AMT faculty advisor.

Computer Literacy

This degree requires computer competency, which may be demonstrated by any one of the following:

- A 3-credit course in computer language or an introductory course in data processing or microcomputers.
- Work-related experience verifying computer literacy as approved by the faculty advisor.
- Self-initiated computer literacy as approved by the faculty advisor.

Mathematics Proficiency

Demonstrate a proficiency in mathematics at or exceeding MATH A105 level, verified through transcripts or ACCUPLACER score.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the Program Requirements below.

Program Requirements

Code	Title	Credits
Core Courses		
AMT A170	Aircraft Ground Operations and Safety	1
AMT A171	Basic Aerodynamics	3
AMT A172	Aircraft Publications, Regulations and Records	3
AMT A174 & A174L	Fundamentals of Aircraft Electronics and Fundamentals of Aircraft Electronics Lab	5
AMT A175	Drawing and Precision Measurement	2
AMT A176	Aircraft Materials and Processes I	2
AMT A181 & A181L	Aircraft Fuel Systems and Aircraft Fuel Systems Lab	4
AMT A186	Aircraft Non-Destructive Inspection Methods	3
AMT A272	Aircraft Electrical Hardware and Systems	3
AMT A274 & A274L	Aircraft Electronic Systems and Aircraft Electronic Systems Lab	6
Total Credits		32

Complete one of the following concentration areas:

Code	Title	Credits
Airframe Concentration		
AMT A185 & A185L	Aircraft Sheetmetal Structures and Aircraft Sheetmetal Structures Lab	5
AMT A273 & A273L	Aircraft Fluid Power Systems and Aircraft Fluid Power Systems Lab	4
AMT A283 & A283L	Aircraft Auxiliary Systems and Aircraft Auxiliary Systems Lab	4
AMT A285 & A285L	Aircraft Bonded Structures and Aircraft Bonded Structures Lab	5
AMT A286	Aircraft Materials and Processes II	2
AMT A364	Aircraft Avionics Systems	3
AMT A369 & A369L	Airframe Assembly and Inspections and Airframe Assembly and Inspections Lab	5
Total Credits		28

Code	Title	Credits
Powerplant Concentration		
AMT A177	Reciprocating Engine Theory	2
AMT A178	Turbine Engine Theory	2
AMT A187 & A187L	Aircraft Reciprocating Engine Overhaul and Aircraft Reciprocating Engine Overhaul Lab	5
AMT A279 & A279L	Aircraft Turbine Engine Repair and Overhaul and Aircraft Turbine Engine Repair and Overhaul Lab	4
AMT A282	Aircraft Propeller Systems	1
AMT A284 & A284L	Aircraft Electrical Machinery and Aircraft Electrical Machinery Lab	4
AMT A287 & A287L	Reciprocating Engine Installation and Operation and Reciprocating Engine Installation and Operation Lab	5
AMT A289 & A289L	Turbine Engine Installation and Operation and Turbine Engine Installation and Operation Lab	5
Total Credits		28

A total of 75 credits is required for the degree.

Licensure and/or Certification

Graduates of the Associate of Applied Science in Aviation Maintenance Technology are eligible to sit for the Federal Aviation Administration (FAA) national certification examination(s).

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Student Learning Outcomes

At the completion of this program, graduates will be able to:

- Demonstrate proficient, entry-level aviation maintenance skills.
- Demonstrate proficiency in emphasis area skills: airframe or powerplant.
- Demonstrate knowledge of aircraft engines, structures, and systems, as well as appropriate FAA regulations.
- Demonstrate knowledge of industry information: current status, segments and opportunities.
- Demonstrate critical thinking, problem solving, and communication skills.

Associate of Applied Science in Professional Piloting

Professional pilots need knowledge of aerodynamics, aircraft engine and system operation, aircraft operating limitations and performance, weather and atmospheric processes, as well as navigation and communication methods. This degree program prepares graduates for careers in professional flying. The FAA has authorized UAA to certify its professional piloting graduates as eligible for an Airline Transport Pilot Certificate with reduced aeronautical experience.

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Special Considerations

The following applies for those students desiring to pursue a professional piloting degree:

- Students must meet with the aviation academic advisor to obtain departmental approval to register for all flight courses. Flight training costs are not included in university tuition and fees. Flight training costs are based on hourly rates established for each aircraft type flown. Students will be provided with current hourly flight costs and program cost estimates when they meet with the department's academic advisor.
- Students must pass an FAA Class II medical examination before beginning any flight training.
- U.S. citizens must present verification of U.S. citizenship before beginning any flight or airplane simulator training. The following three methods are acceptable: an unexpired U.S. passport, an original or raised seal official copy of birth certificate, or an

original or raised seal official copy of Certificate of Naturalization. Non-U.S. citizens must register and receive approval from the Transportation Security Administration before beginning any flight or simulator training. Please contact the Aviation Technology Division (ATD) Office for information.

- Once formally admitted to the AAS in Professional Piloting or the BS in Aviation Technology or registered for aviation classes at UAA, all subsequent required flight training must be completed in residence at UAA. Enrolled students who receive flight training outside UAA under specific curricula will not receive credit for the corresponding UAA courses.
- All students are required to complete a minimum of the FAA Instrument Airplane Pilot rating and the FAA Commercial Airplane Single-engine Land Pilot certificate while in residence at UAA.
- Military pilots may petition to have appropriate curriculum requirements awarded based on FAA pilot certificates held on a case-by-case basis.
- It should be noted that it is possible to take several of the General Course Requirements online. However, there is a very limited selection of aviation courses taught online.

Advising

All students must meet with an ATD academic advisor prior to beginning this program of study and are encouraged to meet each semester to review their academic progress and plan future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise. Degree check sheets are available in the ATD Office, and students may also access DegreeWorks for verification of degree requirements.

See an ATD advisor for appropriate sequence of courses.

Academic Requirements

In order to progress within the AAS Professional Piloting program, students must register for a flying course within three semesters of admittance. Students who have not registered for a flying course by this time will be removed from the program.

Once enrolled in any flight training course, students are expected to complete the course requirements within 12 months from the date of registration. Failure to do so will be considered unsatisfactory progress and will result in a failing (F) grade in that registered flight course.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
ATA A102	Introduction to Aviation Technology	3
ATA A133	Aviation Law and Regulations	3

ATA A134	Principles of Aviation Administration	3
ATA A233	Aviation Safety	3
ATA A331	Human Factors in Aviation	3
ATA A335 or ATP A305	Airport Operations Airplane Multiengine Land Rating	3
ATA A337	Airline Operations	3
ATP A100	Private Pilot Ground School	3
ATP A101	Pre-Professional Flying *	2
ATP A116	Instrument Ground School	3
ATP A126	Instrument Flying	2
ATP A200	Commercial Ground School	3
ATP A218	Commercial Flying I *	1.5
ATP A219	Commercial Flying II *	1.5
ATP A220	Commercial Flying III *	2
ATP A235	Elements of Weather	3
WRTG A212	Writing and the Professions	3
MATH A105 or MATH A121 or MATH A151 or MATH A152 or MATH A251 or MATH A221	Intermediate Algebra ** College Algebra for Managerial and Social Sciences College Algebra for Calculus Trigonometry Calculus I Applied Calculus for Managerial and Social Sciences	3-4
Natural Science Course with Lab **		4
PHIL A101 or PHIL A201 or PHIL A301	Introduction to Logic ** Introduction to Philosophy Ethics	3
Total Credits		55-56

* All flying courses require special documentation and departmental approval before registration.

** May be used to fulfill the Associate of Applied Science General Course Requirements.

A total of 61 credits is required for the degree.

Program Student Learning Outcomes

At the completion of this program, students will be able to:

- Demonstrate proficiency in instrument pilot and commercial pilot knowledge and flight skills.
- Demonstrate knowledge of aviation law and regulations, and of the legal issues affecting the aviation industry.
- Demonstrate knowledge of the issues affecting aviation safety and safety management.
- Demonstrate knowledge of aviation weather and of aviation weather services.

Bachelor of Science in Aviation Technology

The Bachelor of Science in Aviation Technology (BSAT) prepares individuals for professional positions within the aviation industry. Related career opportunities are found with airlines, airports, general aviation, government organizations, education and the aerospace industry.

Within the degree there are two emphasis areas: Aviation Management and Professional Piloting. Each emphasis has discrete program description and outcomes. The specific interests and career goals of each student determine the emphasis area to pursue. The degree includes university General Education Requirements (GERs), a common set of core courses and courses relative to each individual emphasis.

Aviation Management Emphasis

The BSAT with the Aviation Management emphasis is designed to prepare graduates for management positions in all aspects of the aviation industry. The BSAT provides students not only with the organizational, human relations and managerial skills required in aviation management, but also with the appropriate technical background.

Professional Piloting Emphasis

Professional pilots need knowledge of aerodynamics, aircraft engine and system operation, aircraft operating limitations and performance, weather and atmospheric processes, as well as navigation and communication methods. This degree program prepares graduates for careers in professional flying and management. The Special Considerations and Academic Requirements contained in the Associate of Applied Science in Professional Piloting (p. 307) also apply to this emphasis area. The FAA has authorized UAA to certify its professional piloting graduates as eligible for an Airline Transport Pilot Certificate with reduced aeronautical experience.

Admission Requirements

- Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).
- Satisfy any additional admission requirements for the emphasis areas of aviation management and professional piloting described below.
- Satisfy any certification requirements established by applicable government agencies of applicable emphasis.

Advising

All students must meet with an Aviation Technology Division (ATD) academic advisor prior to beginning this program of study and are encouraged to meet each semester to review their academic progress and plan future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise. Degree check sheets are available in the ATD Office, and students may also access UAA DegreeWorks for verification of degree requirements.

See the ATD advisor for appropriate sequence of courses. A strong background in science, math and reading skills is highly recommended.

It should be noted that it is possible to take several of the GER courses online. However, there is a very limited selection of aviation courses taught online.

Academic Requirements

Once enrolled in any flight training course at UAA, students are required to complete the course requirements within 12 months from the date of registration. Failure to do so will be considered unsatisfactory progress and will result in a failing (F) grade within that registered flight course.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- Complete the major requirements below, earning a minimum grade of C in each aviation technology course.
- Complete requirements from one of the following emphases.

Major Requirements

Code	Title	Credits
Core Courses		
AMT A171	Basic Aerodynamics	3
ATA A102	Introduction to Aviation Technology	3
ATA A133	Aviation Law and Regulations	3
ATA A134	Principles of Aviation Administration	3
ATA A233	Aviation Safety	3
ATA A331	Human Factors in Aviation	3
ATA A337	Airline Operations	3
ATA A415	Company Resource Management	3
ATA A425	Civil Aviation Security	3
ATA A431	Aircraft Accident Investigation	3
ATA A492	Air Transportation System Seminar	3
ATC A143	ATC Regulations	3
or ATC A147	Air Traffic Communications	
ATP A100	Private Pilot Ground School	3
ATP A235	Elements of Weather	3
ECON A201	Principles of Macroeconomics	3
PHIL A101	Introduction to Logic	3
or PHIL A201	Introduction to Philosophy	
or PHIL A301	Ethics	
or PHIL A305	Professional Ethics	
PHYS A123	College Physics I	3
PHYS A123L	College Physics I Laboratory	1

WRTG A212	Writing and the Professions	3
Total Credits		55

Select one of the following emphasis areas and complete the listed required courses.

Aviation Management Emphasis

Special Considerations

The following applies for those students desiring to pursue an aviation management emphasis:

1. Completion of prerequisite for or test placement into MATH A121 or higher and WRTG A111 or higher. For testing schedule, contact Testing Center at (907) 786-4500.

Code	Title	Credits
ACCT A201	Principles of Financial Accounting	3
ACCT A202	Principles of Managerial Accounting	3
ATA A335	Airport Operations	3
ATA A336 or ATC A440	Air Service Operations Facility Operation and Administration	3
BA/JUST A241	Business Law I	3
BA A300	Organizational Theory and Behavior	3
BA A343 or BA A388	Principles of Marketing Globalization and Business Environment	3
BA A361	Human Resource Management	3
BA A461	Negotiation and Conflict Management	3
ECON A202	Principles of Microeconomics	3
STAT A200	Elementary Statistics	3
or any class for which STAT A200 is a prerequisite.		
Choose a minimum of 15 credits of advisor-approved electives, 9 of which must be upper-division. The following are recommended elective support courses:		15

ATA A490	Advanced Topics in Aviation Technology	
ATC A325	Tools for Weather Briefing	
BA A347	International Marketing	
BA A381	Consumer Behavior and Relationship Management	
BA A460	Marketing Management	
CIS A280	Managerial Communications	
CIS A376	Management Information Systems	
PER A100	Fitness for Life *	
PER elective *		
PSY A380	Psychology of Stress and Coping	
Total Credits		48

* Maximum of 2 PER elective credits allowed.

A minimum of 120 credits is required for the degree, 42 of which must be upper-division.

Professional Piloting Emphasis

Special Considerations

The following applies for those students desiring to pursue a professional piloting emphasis:

1. Flight training costs are not included in university tuition and fees. Students must meet with the aviation academic advisor to obtain departmental approval to register for all flight courses. Flight training costs are based on hourly rates established for each aircraft type flown. Students will be provided with current hourly flight costs and program cost estimates when they meet with the department's academic advisor.
2. Students must pass an FAA Class II medical examination before beginning any flight training.
3. U.S. citizens must present verification of U.S. citizenship before beginning any flight or airplane simulator training. The following three methods are acceptable: an unexpired U.S. passport, an original or raised seal official copy of birth certificate, or an original or raised seal official copy of Certificate of Naturalization. Non-U.S. citizens must register and receive approval from the Transportation Security Agency before beginning any flight or simulator training. Please contact the ATD Office for information.
4. Once formally admitted to the BS in Aviation Technology program or registered for aviation classes at UAA, all subsequent required flight training must be completed in residence at UAA. Enrolled students who receive flight training outside UAA under specific curricula will not receive credit for the corresponding UAA courses.
5. All students are required to complete a minimum of the FAA Instrument Airplane Pilot rating, the FAA Commercial Airplane Single-engine Land Pilot certificate, and the FAA Multi-engine Land Rating while in residence at UAA.
6. Military pilots may petition to have appropriate curriculum requirements awarded based on FAA pilot certificates held on a case-by-case basis.
7. Completion of prerequisite for or test placement into MATH A121 or higher and WRTG A111 or higher. For testing schedule, contact Testing Center at (907) 786-4500.

Code	Title	Credits
ATC A325	Tools for Weather Briefing	3
ATP A101	Pre-Professional Flying	2
ATP A116	Instrument Ground School	3
ATP A126	Instrument Flying	2
ATP A200	Commercial Ground School	3
ATP A218	Commercial Flying I	1.5
ATP A219	Commercial Flying II	1.5
ATP A220	Commercial Flying III	2
ATP A305	Airplane Multiengine Land Rating ***	2
ATP A320	Flight Dynamics	3

ATP A332	Transport Aircraft Systems	3
BA A300	Organizational Theory and Behavior	3
BA A361	Human Resource Management	3
BA A461	Negotiation and Conflict Management	3
MATH A152	Trigonometry	3

or any class for which MATH A152 is a prerequisite

Choose a minimum of 10 credits of advisor-approved electives, 4 of which must be upper-division. The following are recommended elective support courses:

ATA A134	Principles of Aviation Administration	
ATA A335	Airport Operations	
ATA A336	Air Service Operations	
ATA A490	Advanced Topics in Aviation Technology	
ATP A104	Flying Alaska Bush	
ATP A231	Search, Survival, and Rescue	
ATP A300	CFI Ground School	
ATP A301	CFI Flying	
ATP A405	Additional CFI Rating	
PER A100	Fitness for Life	
PER elective (must be combined with PER A100)		
PSY A380	Psychology of Stress and Coping	
Total Credits		48

* All flying courses require special documentation and departmental approval before registration.

A minimum of 120 credits is required for the degree, 42 of which must be upper-division.

Aeronautical Studies Emphasis

Special Consideration

The following applies for those students desiring to pursue an aeronautical studies emphasis:

1. This curriculum is designed as a flexible option for those with previous aviation or aviation education experience. As such those enrolling in the Aeronautical Studies emphasis must either be co-enrolled in an associate level aviation degree program or have previously completed an associate level aviation degree.

Code	Title	Credits
ATP A433	Aerospace Physiology	3
BA A166	Entrepreneurship and Small Business Management	3
ENGL A312	Advanced Technical Writing	3
MATH A152 or STAT A200	Trigonometry Elementary Statistics	3

or any class for which MATH A152 or STAT A200 is a prerequisite

TECH A302	Organizational Safety and Health	3
TECH A305	Applied Leadership for Technicians	3
30 credits of advisor-approved electives, minimum of 24 must be Aviation-related (ATA, ATP, ATC, AMT, AT).		30
Total Credits		48

A minimum of 120 credits is required for the degree, 42 of which must be upper-division. All elective courses must be approved by the academic advisor.

Program Student Learning Outcomes

Aviation Management Emphasis

At the completion of this program, students will be able to:

- Demonstrate technical knowledge of aircraft operating limitations and performance.
- Demonstrate knowledge of aviation law and regulations, and of the legal issues affecting the aviation industry.
- Demonstrate knowledge of the issues affecting aviation safety and safety management.
- Demonstrate knowledge of basic business management skills and supervisory techniques.
- Demonstrate a broad knowledge of the aviation industry.
- Demonstrate a broad knowledge of aviation management functions and techniques.

Professional Piloting Emphasis

At the completion of this program, students will be able to:

- Demonstrate proficiency in instrument pilot, commercial pilot knowledge, and flight skills.
- Demonstrate knowledge of aviation law and regulations, and the legal issues affecting the aviation industry.
- Demonstrate knowledge of the issues affecting aviation safety and safety management.
- Demonstrate knowledge of aviation weather and of aviation weather services.
- Demonstrate a broad knowledge of the aviation industry.

Aeronautical Studies Emphasis

At the completion of this program, students will be able to demonstrate:

- technical knowledge of aircraft operating limitations and performance.
- knowledge of aviation law and regulations, and the legal issues affecting the aviation industry.
- knowledge of the issues affecting aviation safety and safety management.
- a broad knowledge of the aviation industry.

Minor in Air Traffic Control

Students majoring in another discipline or pursuing an aviation degree who wish to minor in air traffic control (ATC), must complete the following requirements. Students completing the ATC Minor will be eligible for recommendation for hire as air traffic controllers under the Federal Aviation Administration (FAA) College Training Initiative (CTI) program. Completion of the ATC Minor does not guarantee hire by the FAA.

Special Considerations

UAA has no restrictions on age or physical condition of students. However, students desiring employment with the FAA should be aware of employment requirements:

1. Medical Certificate is required as depicted in FAR 65.49 and 67 Subpart C.
2. Thirty-year-old maximum age restriction for students anticipating employment in terminal or en route options.
3. For employment considerations with the FAA, students must receive a PASS score on the Air Traffic-Selection and Training (ATSAT) examination administered by the FAA. The examination provides a systematic process for continued enhancement of air traffic selection and training by testing candidates for recognition and cognitive skills required in the air traffic specialty and to identify the "composite controller."

Advising

All students must meet with an academic advisor in the Aviation Technology Division (ATD) prior to beginning any program of study and are encouraged to meet each semester for the purpose of reviewing their academic progress and planning future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise. Degree check sheets are available in the ATD office.

FAA Recommendation for Employment

To be eligible for FAA employment, a student must achieve a C or better in the following air traffic control courses:

Code	Title	Credits
ATC A143	ATC Regulations	3
ATC A144	ATC Flight Procedures	3
ATC A147	Air Traffic Communications	3
ATC A241 & A241L	Control Tower Operations and Control Tower Operations Lab	4
ATC A242 & A242L	ATC Terminal Radar Procedures and ATC Terminal Radar Procedures Lab	4
ATC A243 & A243L	ATC Enroute Procedures and ATC Enroute Procedures Lab	4

Program Requirements

1. In order to advance to 200 level ATC classes (ATC A241, ATC A241L, ATC A242, ATC A242L, ATC A243, ATC A243L)

students must have a C or better in ATC A143, ATC A144 and ATC A147.

2. Students may repeat ATC A143, ATC A144, and ATC A147 only once due to performance.
3. Students must complete the following courses:

Code	Title	Credits
ATC A143	ATC Regulations	3
ATC A144 or ATP A116	ATC Flight Procedures Instrument Ground School	3
ATC A147	Air Traffic Communications	3
ATC A325	Tools for Weather Briefing	3
ATP A235	Elements of Weather	3
ATC A440 or ATA A492	Facility Operation and Administration Air Transportation System Seminar	3
Select one of the following:		4
ATC A241 & A241L	Control Tower Operations and Control Tower Operations Lab	
ATC A242 & A242L	ATC Terminal Radar Procedures and ATC Terminal Radar Procedures Lab	
ATC A243 & A243L	ATC Enroute Procedures and ATC Enroute Procedures Lab	
Total Credits		22

A total of 22 credits is required for the minor; 6 credits must be upper division.

Minor in Aviation Technology

Students majoring in another discipline who wish to minor in aviation technology must complete the following requirements. Students are encouraged to select courses from the following list. Students may request prior approval of other aviation technology courses.

Code	Title	Credits
Complete 18 credits from the following:		18
AMT A171	Basic Aerodynamics	
AMT A172	Aircraft Publications, Regulations and Records	
AMT A177	Reciprocating Engine Theory	
AMT A178	Turbine Engine Theory	
AMT A185 & A185L	Aircraft Sheetmetal Structures and Aircraft Sheetmetal Structures Lab	
AMT A285 & A285L	Aircraft Bonded Structures and Aircraft Bonded Structures Lab	
ATA A132	History of Aviation	
ATA A133	Aviation Law and Regulations	

ATA A233	Aviation Safety
ATA A331	Human Factors in Aviation
ATA A335	Airport Operations
ATA A336	Air Service Operations
ATA A337	Airline Operations
ATA A425	Civil Aviation Security
ATA A431	Aircraft Accident Investigation
ATA A492	Air Transportation System Seminar
ATC A147	Air Traffic Communications
ATP A100	Private Pilot Ground School
ATP A235	Elements of Weather

Total Credits 18

A total of 18 credits is required for the minor; 6 credits must be upper division.

Computer Electronics

Kenai Peninsula College

156 College Road, Soldotna, AK 99669, (907) 262-0330, (877)

262-0330

www.kpc.alaska.edu (<http://www.kpc.alaska.edu>)

Admission to the Associate of Applied Science in Computer Electronics is currently suspended. Please contact Kenai Peninsula College for more information.

Program of Study

Associate of Applied Science

- AAS in Computer Electronics (p. 313)

Faculty

Rich Kochis, Assistant Professor, rkochis@alaska.edu

Associate of Applied Science in Computer Electronics

Admission to this program is currently suspended. Contact Kenai Peninsula College for more information.

Computer Information and Office Systems

University Center (UC), Room 130, (907) 786-6495

www.uaa.alaska.edu/ctc (<http://www.uaa.alaska.edu/ctc>)

Kenai Peninsula College, Kenai River Campus

156 College Road, Soldotna, AK 99669, (907) 262-0330 or (877)

262-0330 (toll free)

www.kpc.alaska.edu (<http://www.kpc.alaska.edu>)

Kodiak College

117 Benny Benson Drive, Kodiak, AK 99615, (907) 486-4161 or (800)

486-766

www.koc.alaska.edu (<http://www.koc.alaska.edu>)

Matanuska-Susitna College

8295 East College Drive (P.O. Box 2889), Palmer, AK 99645, (907)

745-9774

[matsu.alaska.edu/degree-programs/computer-information-office-](http://matsu.alaska.edu/degree-programs/computer-information-office-systems)

[systems](http://matsu.alaska.edu/degree-programs/computer-information-office-systems) ([http://matsu.alaska.edu/degree-programs/computer-](http://matsu.alaska.edu/degree-programs/computer-information-office-systems)

Administrative professionals are at the information center of every office, and their titles reflect the shifting role they play and the increased responsibilities they have assumed. These titles include administrative assistant, executive assistant, receptionist or information clerk, payroll assistant, information/database specialist.

The CIOS program prepares entry-level, experienced or workforce re-entry level office workers to successfully engage in business office environments where communication, technical, organizational, interpersonal and teamwork skills are essential to business success. CIOS courses also cover topics that help prepare students for the Microsoft Office certification examinations and the Certified Administrative Professional (CAP) and Certified Professional Secretary (CPS) certification examinations.

The OECs are designed to give students skills in a specific occupational field and indicate competence in a technical and professional area. Students must receive a satisfactory grade (C or higher, or P) in all required CIOS courses to be awarded an OEC.

Programs of Study

Occupational Endorsement Certificates

- OEC in Corporate Specified Skills (p. 314)
- OEC in Office Foundations (p. 314)
- OEC in Office Support (p. 314)

Associate of Applied Science

- AAS in Computer Information and Office Systems (p. 315)

Faculty

Anchorage

Community & Technical College, (907) 786-6400

Kenai

Kenai Peninsula College, (907) 262-0330

Kodiak

Heather Corriere, Department Chair/Term Assistant Professor, hlcorriere@alaska.edu

Matanuska-Susitna College

Jason Stevens, Assistant Professor, jstevens8@alaska.edu

Occupational Endorsement Certificate in Corporate Specified Skills

Admission to this program is currently suspended. Contact the Community & Technical College at (907) 786-6400 for more information.

Occupational Endorsement Certificate in Office Foundations

This program is available at Mat-Su College and Kodiak College. Admission to this program at the Community & Technical College and Kenai Peninsula College is currently suspended.

Provides foundational skills required for entry into the administrative office professional field.

Admission Requirements

Satisfy the Application and Admission Requirements for Occupational Endorsement Certificate Programs (p. 53).

Advising

Students should contact the CIOS faculty for assistance with course planning toward the occupational endorsement certificate.

Graduation Requirements

- Satisfy the General University Requirements for Occupational Endorsement Certificates (p. 82).
- Complete the program requirements below.
- Students must earn a satisfactory grade (C or higher, or P) in all CIOS courses required for the certificate.

Program Requirements

All students must take the following basic computer skills courses or possess equivalent knowledge. Students may take a test to prove proficiency in these areas. Beginning computer users should begin with the basic skills courses. The basic skills courses cover foundational skills and students may test out of them.

Code	Title	Credits
Basic Skills		
CIOS A101A	Keyboarding A: Basic Keyboarding	1
CIOS A113	Operating Systems: MS Windows	1
CIOS A130A	Word Processing I: MS Word	1
CIOS A135A	Spreadsheets I: MS Excel	1
CIOS A146	Internet Concepts and Applications	1

Code	Title	Credits
Core Courses		
CIOS A101B	Keyboarding B: Business Documents I	1

CIOS A101C	Keyboarding C: Business Documents II	1
CIOS A115	10-Key for Business Calculations	2
CIOS A125A	Electronic Communications I: MS Outlook	1
CIOS A140A	Databases I: MS Access	1
CIOS A150A	Presentations: MS PowerPoint	1
CIOS A161A	Business Writing Strategies	2
CIOS A165	Office Procedures	3
CIOS A230A	Word Processing II: MS Word	1
Advisor-approved electives		3
Total Credits		16

A total of 16 credits is required for this OEC.

Program Student Learning Outcomes

Upon completion of this OEC, students will demonstrate:

- Keystroke skills of 40 net words per minute minimum.
- Intermediate skills in word processing and business document formatting.
- Entry-level skills in spreadsheets, databases, presentations, and electronic communication.
- Customer service skills.
- Knowledge of proper grammar and mechanics used in business documents.
- Basic business math and 10-key calculator operations.
- Entry-level skills in file organization and management.

Occupational Endorsement Certificate in Office Support

This program is available at Mat-Su College and Kodiak College. Admission to this program at the Community & Technical College and Kenai Peninsula College is currently suspended.

Builds on the Office Foundations OEC with additional skills an administrative assistant would typically use in an office setting.

Admission Requirements

- Satisfy the Application and Admission Requirements for Occupational Endorsement Certificate Programs (p. 53).
- Complete the 16-credit Office Foundations OEC (p. 314) prior to admission to this program.

Advising

Students should contact the CIOS faculty for assistance with course planning toward the occupational endorsement certificate.

Graduation Requirements

- Satisfy the General University Requirements for Occupational Endorsement Certificates (p. 82).
- Complete the program requirements below.

- Earn a satisfactory grade (C or higher, or P) in all CIOS courses required for the certificate.

Program Requirements

Code	Title	Credits
CIOS A235A	Spreadsheets II: MS Excel	1
CIOS A260A	Business Communications	3
CIOS A262A	Job Search Strategies	2
CIOS A264A	Records Management	2
CIOS A265	Office Management	3
CIOS A276A	Independent Project	1
CIOS A295	Office Internship	1
WRTG A111	Writing Across Contexts	3
Total Credits		16

A total of 16 credits is required for this OEC.

Program Student Learning Outcomes

Upon completion of this OEC, students will demonstrate:

- Keystroke skills of 40 net words per minute minimum.
- Intermediate skills in spreadsheets.
- Intermediate skills in managing data using a variety of media.
- Develop business quality digital presentations and documents using a variety of media.
- Compose appropriate business communications.
- Collaborate in office settings

Associate of Applied Science in Computer Information and Office Systems

Admission to this program is currently suspended. Contact the Community & Technical College at (907) 786-6400 for more information.

Computer Systems Technology

Matanuska-Susitna College

8295 East College Drive (P.O. Box 2889) Palmer, AK 99645, (907) 745-9774

matsu.alaska.edu/degree-programs/cst (<http://matsu.alaska.edu/degree-programs/cst>)

The Computer Systems Technology program is offered only through Matanuska-Susitna College.

An Associate of Applied Science in Computer Systems Technology (CST) provides education in the field of network and systems administration. This program encompasses vendor-neutral and theoretical concepts and practices; it also includes both Windows Server operating systems and Cisco routing and switching technology. Five or more full-time semesters are required to complete the degree program.

The CST degree offers students business, communication, teamwork, and technical skills, and IT concepts needed to enter the workforce as entry-level technicians or administrators. It also provides a foundation for advanced studies in technology.

Program of Study

Associate of Applied Science

- AAS in Computer Systems Technology (p. 315)

Faculty

Harry Banks, Instructor, hlbanks@alaska.edu

Alan Fugleberg, Program Coordinator, afugleberg@alaska.edu

Associate of Applied Science in Computer Systems Technology

This program is delivered only through Matanuska-Susitna College. Admission to this program is currently suspended at Kodiak College; contact the college for more information.

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the program requirements below.
- Achieve a grade of C or higher in all program course requirements.

Program Requirements

Code	Title	Credits
Workforce Skills		
BA A151	Business Foundations *	3
BA A231	Fundamentals of Supervision	3
CIS A105	Introduction to Personal Computers and Application Software	3
or CIS A110	Computer Concepts in Business	
WRTG A212	Writing and the Professions	3
MATH A105	Intermediate Algebra **, **	3-4
or MATH A121	College Algebra for Managerial and Social Sciences	
or MATH A151	College Algebra for Calculus	
Computer Knowledge and Project Skills		
CNT A160	PC Operating Systems	3
CNT A165	Customer Service Fundamentals	1
CNT A168	Computer User Support and Help Desk	3

CNT A180	Enterprise Design, Peripherals and Storage	3-4
or CNT A210	PC Technician Fundamentals	
CNT A275	Information Technology Project Management	2
CNT A276	Individual Technical Project	1-3
or CNT A282	Industry Workplace Experience	
Industry Server Operating System Environment		
CNT A240	Industry PC Configuration Essentials	2
CNT A241	Administering and Supporting Industry Network Infrastructure	3
CNT A242	Industry Network Directory Configuration	3
CNT A243	Industry Application Infrastructure	3
Network Router and Switching		
CNT A170	CCNA 1	4
CNT A261	CCNA 2	4
CNT A270	CCNA 3	4
CNT A271	CCNA 4	4
Complete 6 credits from the following:		6
CNT A264	Introduction to Information Security	
CNT A290	Selected Topics in Information Technology ***	
CNT A390	Selected Topics in Computer and Networking Technology ***	
Total Credits		61-65

* Course may also be used to satisfy General Course Requirements.

** Or any MATH course for which MATH A105, MATH A121 or MATH A151 is a prerequisite.

*** CNT A290 and CNT A390 may be taken twice with a change in subtitle.

A minimum of 67 credits is required for the degree.

Program Student Learning Outcomes

Upon program completion, CST graduates will be able to demonstrate:

- the ability to manage an IT-related project by professionally and ethically utilizing business principles, communication skills and teamwork.
- competence in IT workplace service skills through customer service, troubleshooting and implementation of security.
- an understanding of IT concepts and technical skills, installing and configuring operating systems, and using utility software.
- knowledge of computer hardware and peripherals.
- knowledge of network infrastructure, network work groups and domain administration.

Computer and Networking Technology

University Center (UC), Room 130, (907) 786-6423

www.uaa.alaska.edu/cnt (<http://www.uaa.alaska.edu/cnot>)

The computer and networking technology (CNT) program provides entry-level skills and career education to meet the demand for well-trained technicians in the computer electronics and networking industries. The CNT program offers an Occupational Endorsement Certificate in Cisco Certified Network Associate (CCNA) and an Associate of Applied Science in Computer and Networking Technology.

Graduates from the CNT program can be employed as skilled technical support workers in a variety of fields including networking, network administration, computer technical support and computer repair.

Students should consult the CNT faculty for assistance with curriculum planning toward certifications such as A+, Net+, CCNA, ICSCA Customer Service, Microsoft Certified Professional and other industry-recognized certifications.

Programs of Study

Occupational Endorsement Certificate

- OEC in Cisco-Certified Network Associate (CCNA) (p. 316)

Undergraduate Certificate

- Certificate in Computer and Networking Technology (p. 317)

Associate of Applied Science

- AAS in Computer and Networking Technology (p. 317)

Faculty

Anchorage

David Morrison, Associate Professor, dsmorrison@alaska.edu

Chris Foster, Assistant Professor, cbfoster@alaska.edu

(grplunkett@alaska.edu)

Matanuska-Susitna

Harry Banks, Instructor, hbanks@alaska.edu

Occupational Endorsement Certificate in Cisco-Certified Network Associate (CCNA)

Admission Requirements

Satisfy the Application and Admission Requirements for Occupational Endorsement Certificate Programs (p. 53).

Advising

Students should meet with CNT faculty concerning what courses to take each semester as well as general degree planning.

Graduation Requirements

- Satisfy the General University Requirements for Occupational Endorsement Certificates (p. 82).
- Complete the program requirements below.
- Earn a satisfactory grade (C or higher) in all Program Requirements.

Program Requirements

Code	Title	Credits
CNT A170	CCNA 1	4
CNT A261	CCNA 2	4
CNT A270	CCNA 3	4
CNT A271	CCNA 4	4
Total Credits		16

A total of 16 credits is required for the occupational endorsement certificate.

Program Student Learning Outcomes

Students graduating with an Occupational Endorsement Certificate in Cisco Certified Network Associate (CCNA) will be able to demonstrate:

- Proficiency in Cisco router installation, configuration and troubleshooting in multi-protocol inter-networks.
- Proficiency in Cisco switch and VLAN installation, configuration and troubleshooting in multi-protocol inter-networks.
- Competency in entry-level tasks of planning, design, installation, operation and troubleshooting Ethernet and TCP/IP networks.

Undergraduate Certificate in Computer and Networking Technology

Admission to this program is currently suspended. Contact the Community & Technical College at (907) 786-6400 for more information.

Associate of Applied Science in Computer and Networking Technology

This associate degree prepares students to install, configure, administer, operate and repair networks used to connect computing and digital communications systems of various types.

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Advising

Students should meet with CNT faculty concerning what courses to take each semester as well as general degree planning.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83) (15 credits). WRTG A212 recommended.
- Complete the program requirements below.
- Earn a satisfactory grade (C or higher, or P) in all Program Requirements.

Program Requirements

Code	Title	Credits
CNT A162	PC Architecture and Building	3
CNT A165	Customer Service Fundamentals	1
CNT A170	CCNA 1	4
CNT A180	Enterprise Design, Peripherals and Storage	4
CNT A183	Local Area Networks	3
CNT A240	Industry PC Configuration Essentials	2
CNT A261	CCNA 2	4
CNT A264	Introduction to Information Security	3
CNT A270	CCNA 3	4
CNT A271	CCNA 4	4
CNT A280	Server Operating Systems	3
Complete at least 12 credits from the following or courses approved by CNT faculty advisor:		12
CNT A262	Computer Technical Support	
CNT A276	Individual Technical Project	
CNT A282	Industry Workplace Experience	
CNT A290	Selected Topics in Information Technology (May be taken multiple times under different titles)	
CNT A390	Selected Topics in Computer and Networking Technology (May be taken multiple times under different titles)	
Total Credits		47

A minimum of 62 credits is required for the degree.

Students graduating with an Associate of Applied Science in Computer and Networking Technology will be able to demonstrate:

- Proficiency in Cisco router installation, configuration and troubleshooting in multi-protocol inter-networks.
- Proficiency in Cisco switch and VLAN installation, configuration and troubleshooting in multi-protocol inter-networks.
- Competency in entry-level tasks of planning, design, installation, operation and troubleshooting Ethernet and TCP/IP networks.

- Computer literacy in PC applications and operating systems.
- Proficiency in PC architecture, troubleshooting and repair.
- The installation, configuration, basic administration and troubleshooting of the current prevalent operating systems.
- Basic computer and network system administration.
- The configuration and maintenance of network and computer system security including security incident response.
- Proper documentation, customer service skills, phone and closing skills.
- The ability to think critically and solve problems within the domain.

Construction Management

University Center (UC), Room 130, (907) 786-6423

www.uaa.alaska.edu/construction (<http://www.uaa.alaska.edu/cdt>)

The construction management (CM) program provides comprehensive preparation and education to meet the growing need for highly trained and educated construction management professionals. Construction managers plan, direct and are responsible for managerial oversight of construction projects. They are responsible for coordinating and managing people, materials and equipment; budgets, schedules and contracts; and for the safety of employees and the general public. Construction managers work closely with architects, engineers, owners and other contractors on a construction project. Construction managers determine construction means and methods and the most cost-effective plans and schedules. They control construction costs, administer the contract and monitor work progress while ensuring compliance with the project design. Construction managers work in all sectors of the construction industry, for both public and private owners, on projects that range from residential projects to skyscrapers and from rural roads to major highways and bridges. The construction manager's duties are varied, challenging and rewarding.

The CM program at UAA was developed with input from Alaska contractors and professional industry organizations to provide students with a broad knowledge of construction processes and techniques. CM graduates understand basic business principles and possess broad knowledge of the technical and operational aspects of the construction industry. Graduates are able to function both in the construction office and on the job site.

The wide diversity in the construction management profession creates a similar diversity of employment opportunities for graduates. Associate degree graduates are prepared for entry-level positions in varying construction management roles for contractors in both home office and project office/field situations. Bachelor's degree graduates are prepared for a wide variety of professional-level employment opportunities in construction companies, construction management consulting firms, and in the offices of government and project owner agencies. The Associate of Applied Science in Construction Management requires four to five semesters to complete. The Bachelor of Science in Construction Management requires eight to nine semesters to complete.

The Associate of Applied Science in Construction Management and the Bachelor of Science in Construction Management are accredited by the American Council for Construction Education (ACCE). Accreditation

for the two-year Associate of Applied Science (AAS) degree in Construction Management will end at the end of spring 2019 semester. Note: the AAS degree is the first two years of the accredited four-year Bachelor of Science in Construction Management degree.

Advising

Students are strongly encouraged to consult the faculty in the CM program for assistance in designing their course of study to ensure all preparation requirements and prerequisites have been met and that university and major degree requirements are understood and followed.

CM students should meet with their academic advisor each semester for the purpose of reviewing their academic progress and planning future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise. Please call (907) 786-6465 to arrange an appointment with an academic advisor.

Preparation

Students seeking a degree in construction management should prepare for entrance into the program by completing the following high school courses:

Mathematics	Algebra II (skill level as demonstrated by ACT, SAT, or UAA-approved placement test to qualify for enrollment in MATH A105).
Writing	Composition (skill level as demonstrated by ACT, SAT, or UAA placement test to qualify for enrollment in WRTG A111).

The university offers courses to help students without this preparation to meet the math and writing skill levels required in the CM program. Insufficient preparation will increase the number of semesters required to complete the degree.

Programs of Study

Associate of Applied Science

- AAS in Construction Management (p. 318)

Bachelor of Science

- BS in Construction Management (p. 319)

Faculty

Joel Condon, Director/Associate Professor, jcondon1@alaska.edu

*Darryl Jordan, Assistant Professor, djordan@alaska.edu
(dketner1@alaska.edu)*

Associate of Applied Science in Construction Management

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Advising

Certain courses require prerequisites or faculty permission. See an academic advisor for further information.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the program requirements below.
- Achieve a grade of C or better in all courses required for the degree.

Program Requirements

Code	Title	Credits
Support Courses		
ACCT A201	Principles of Financial Accounting	3
BA/JUST A241	Business Law I	3
WRTG A212	Writing and the Professions	3
GEO A181	Construction Surveying	1
MATH A151 & MATH A152 or MATH A155	College Algebra for Calculus and Trigonometry * Precalculus	5-7
Select one science course with laboratory:		4
GEOL A111 & A111L	Physical Geology and Physical Geology Laboratory *	
PHYS A123 & A123L	College Physics I and College Physics I Laboratory *	
Program Courses		
AET A101	Fundamentals of CADD for Building Construction	4
AET A102	Methods of Building Construction	3
AET A123	Codes and Standards	3
AET A142	Mechanical and Electrical Technology	4
AET A231	Structural Technology	4
CM A163	Building Construction Cost Estimating	3
CM A201	Construction Project Management I	3
CM A202	Project Planning and Scheduling	3
CM A205	Construction Safety	3
CM A213	Construction Civil Technology	4
CM A263	Civil Construction Cost Estimating	3
CM A295 or CM A495	Construction Management Internship Advanced Construction Management Internship	3
Total Credits		59-61

* May also be used to satisfy General Course Requirements.

A total of 66-67 credits is required for the degree.

AASCM STUDENT LEARNING OUTCOMES

1. Demonstrate effective communication, both orally and in writing.
2. Create construction project cost estimates.
3. Create construction project schedules.
4. Demonstrate the ability to use current technology related to the construction process.
5. Interpret construction documents (contracts, specifications, and drawings) used in managing a construction project.
6. Apply basic principles of construction accounting.
7. Use basic surveying techniques used in building layout.
8. Discuss basic principles of ethics in the construction industry.
9. Identify the fundamentals of contracts, codes, and regulations that govern a construction project.
10. Recognize basic construction methods, materials and equipment.
11. Recognize basic safety hazards on a construction site and standard prevention measures.
12. Recognize the basic principles of structural design.
13. Recognize the basic principles of mechanical, electrical and piping systems.

Bachelor of Science in Construction Management

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Advising

Certain courses require prerequisites or faculty permission. See an academic advisor for further information.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- In order to receive the Bachelor of Science in Construction Management, students must achieve a grade of C or better in all courses required for the degree.
- Complete the major requirements below.

Major Requirements

Code	Title	Credits
Support Courses		
ACCT A201	Principles of Financial Accounting	3
ACCT A202	Principles of Managerial Accounting	3
AE A403 or ES A411	Arctic Engineering Northern Design	3
BA/JUST A241	Business Law I	3
BA A300	Organizational Theory and Behavior	3
ECON A201	Principles of Macroeconomics *	3
ECON A202	Principles of Microeconomics *	3
WRTG A212	Writing and the Professions	3
GEO A181	Construction Surveying	1
PHIL A301 or PHIL A305	Ethics * Professional Ethics	3
Select two of the following science courses with a laboratory class:		8
CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory *	
GEOL A111 & A111L	Physical Geology and Physical Geology Laboratory *	
PHYS A123 & A123L	College Physics I and College Physics I Laboratory *	
Complete one additional science course with laboratory at or above the 100 level in CHEM, ENVI, GEOL or PHYS *		4
Select one of the following:		3-4
MATH A221	Applied Calculus for Managerial and Social Sciences *	
MATH A251	Calculus I *	
STAT A253	Applied Statistics for the Sciences *	
Core Courses		
AET A101	Fundamentals of CADD for Building Construction	4
AET A102	Methods of Building Construction	3
AET A123	Codes and Standards	3
AET A142	Mechanical and Electrical Technology	4
AET A231	Structural Technology	4
CM A163	Building Construction Cost Estimating	3
CM A201	Construction Project Management I	3
CM A202	Project Planning and Scheduling	3
CM A205	Construction Safety	3
CM A213	Construction Civil Technology	4
CM A263	Civil Construction Cost Estimating	3

CM A301	Construction Project Management II	3
CM A313	Soils in Construction	3
CM A331	Statics and Strength of Materials	3
CM A401	Construction Law	3
CM A422	Sustainability in the Built Environment *	3
CM A440	Financial Management for Construction	3
CM A450	Construction Management Professional Practice *	3
CM A460	Construction Equipment Management and Methods	3
CM A495	Advanced Construction Management Internship	3

* These courses may also be used to satisfy General Education Requirements.

All BSCM majors are also required to sit for the eight-hour, comprehensive American Institute of Constructors, Associate Constructor (Level 1) Exam as part of CM A450. CM A450 should be taken during the last or second-to-last semester before graduation.

A total of 122-123 credits is required for the degree, of which 42 credits must be upper-division.

1. Create written communications appropriate to the construction discipline.
2. Create oral presentations appropriate to the construction discipline.
3. Create a construction project safety plan.
4. Create construction project cost estimates.
5. Create construction project schedules.
6. Analyze professional decisions based on ethical principles.
7. Analyze construction documents for planning and management of construction processes.
8. Analyze methods, materials, and equipment used to construct projects.
9. Apply construction management skills as a member of a multi-disciplinary team.
10. Apply electronic-based technology to manage the construction process.
11. Apply basic surveying techniques for construction layout and control.
12. Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process.
13. Understand construction risk management.

14. Understand construction accounting and cost control.
15. Understand construction quality assurance and control.
16. Understand construction project control processes.
17. Understand the legal implications of contract, common, and regulatory law to manage a construction project.
18. Understand the basic principles of sustainable construction.
19. Understand the basic principles of structural behavior.
20. Understand the basic principles of mechanical, electrical and piping systems

Corrections

Kenai Peninsula College, Kenai River Campus
 156 College Road, Soldotna, AK 99669, (907) 262-0330, (877) 262-0330 (toll-free)
www.kpc.alaska.edu (<http://www.kpc.alaska.edu>)

Kachemak Bay Campus, (907) 235-7743, (877) 262-0330 (toll free to Kenai River Campus and ask to be transferred to Kachemak Bay Campus)

Corrections professionals play important roles in public safety and criminal justice. Correctional officers provide security and confinement for the nation's criminal offenders. Probation/parole officers conduct case management and assist in the movement of prisoners, direct individuals to rehabilitation programs and apprehend violators when public safety is in jeopardy. Criminal justice technicians assist institutional and field officers in a variety of duties within the Department of Corrections (DOC). With experience, criminal justice technicians may transition to officer positions. These positions lead to secure, rewarding positions with excellent benefits and retirement.

The KPC corrections certificate programs provide the academic background required for success in entry-level corrections positions. Instruction includes criminal and restorative justice systems, courses in oral and written communication, and an introduction to theories of criminal behavior. The programs are appropriate for sworn (those with statutory power of arrest or those who are honorably retired law enforcement officers) and non-sworn personnel (law enforcement personnel without powers to arrest or carry firearms). They prepare new applicants for entry-level positions in corrections and provide occupational training for current DOC employees. Graduates will be competitive with non-Alaskans for corrections jobs within Alaska and in other states. These corrections certificate programs have been developed in active collaboration and partnership with the DOC.

The following programs are available:

- Occupational Endorsement Certificate, Corrections
- Undergraduate Certificate, Corrections

Programs of Study

Occupational Endorsement Certificate

- OEC in Corrections (p. 321)

Undergraduate Certificate

- Certificate in Corrections (p. 322)

Faculty

Ruben Foster, Assistant Professor, rafoster2@alaska.edu

Randy Rosencrans, Assistant Professor, rgrosencrans@alaska.edu

Occupational Endorsement Certificate in Corrections

This program is delivered only through Kenai Peninsula College.

This 16-credit hour certificate provides vocational training for entry-level positions in the field of corrections. The certificate can be extended to the Undergraduate Certificate in Corrections (p. 322) with the completion of additional courses.

Admission Requirements

Satisfy the Application and Admission Requirements for Occupational Endorsement Certificate Programs (p. 53).

Program admission will be based on approval through KPC. Students must submit the KPC admissions application and the application for the corrections program. Visit the KPC website or contact KPC academic and staff advisors for more information and admission forms.

Advising

Students are encouraged to contact KPC academic and staff advisors for assistance in planning and reviewing their academic program. Advisors are available prior to enrollment and during the semesters through email, telephone or face-to-face contact. Students interested in the occupational endorsement certificate should consult a faculty advisor in Corrections before enrolling, particularly for information concerning employment restriction.

Preparation

Students must meet all KPC requirements to enroll in courses, as listed in the KPC website or UAOnline (<https://uaonline.alaska.edu>). KPC offers preparatory courses for students who need to improve their academic and study skills in order to succeed in the college environment.

Course Requirements

Certain courses require prerequisites or faculty permission, as listed in this catalog. Call (907) 262-0344 or (877) 262-0330 for further information.

Graduation Requirements

- Satisfy the General University Requirements for Occupational Endorsement Certificates (p. 82).

- Complete the Program Requirements below with a minimum grade of C.

Program Requirements

Code	Title	Credits
CIOS A135A	Spreadsheets I: MS Excel	1
WRTG A111	Writing Across Contexts	3
JUST A110	Introduction to Justice	3
JUST A210	Principles of Corrections	3
Advisor approved electives		6
Total Credits		16

A total of 16 credits is required for the occupational endorsement certificate.

Program Student Learning Outcomes

The specific education outcomes of this program are to produce graduates who are able to:

- Describe the criminal justice system as a whole.
- Demonstrate proficiency in probation, parole and correctional institutional methods.
- Use English language writing skills to communicate and record information appropriately in the corrections field.
- Manipulate spreadsheets and compute formulas with basic proficiency.
- Recognize human services and systems for the helping professions.
- Recognize the addictive process and methods to assist those in addiction.
- Possess competitive entry-level skills for employment and promotion in the field of corrections.

Undergraduate Certificate in Corrections

This program is delivered only through Kenai Peninsula College.

This 31-credit undergraduate certificate provides training in the field of corrections, instruction in written and oral communication skills, and a foundation in restorative justice, criminology and justice organization and management. The certificate may be extended to a more advanced degree with the completion of additional coursework.

Admission Requirements

Satisfy the Application and Admission Requirements for Undergraduate Certificates (p. 53).

Program admission will be based on approval through Kenai Peninsula College (KPC). Students must submit the KPC admissions application and the application for the corrections program.

Advising

Students are encouraged to contact KPC academic and staff advisors for assistance in planning and reviewing the academic program. Advisors

are available prior to enrollment and during the semesters through email, telephone or face-to-face contact. Students interested in the undergraduate certificate should consult a faculty advisor in corrections before enrolling, particularly for information concerning employment restriction.

Students must meet all KPC requirements to enroll in courses, as listed in the KPC website or UAOnline. KPC offers preparatory courses for students who need to improve their academic and study skills in order to succeed in the college environment.

Certain courses require prerequisites or faculty permission, as listed in this catalog. Call (907) 262-0344 or (877) 262-0330 for further information

Graduation Requirements

- Satisfy the General University Requirements for Undergraduate Certificates (p. 82).
- Complete the program requirements below with a minimum grade of C.

Program Requirements

Code	Title	Credits
CIOS A135A	Spreadsheets I: MS Excel	1
COMM A237 or PSY A153	Interpersonal Communication Human Relations	3
JUST A110	Introduction to Justice	3
JUST A210	Principles of Corrections	3
JUST A211	Introduction to Restorative Justice	3
JUST A221	Justice Organization and Management	3
JUST/SOC A251	Crime and Delinquency	3
Select two of the following:		6
WRTG A111	Writing Across Contexts	
WRTG A212	Writing and the Professions	
WRTG A213	Writing and the Sciences	
WRTG A214	Arguing Across Contexts	
Total Credits		25

A total of 31 credits is required for this certificate.

Program Student Learning Outcomes

The specific education outcomes of this program are to produce graduates who are able to:

1. Describe the criminal justice system as a whole and the organization of criminal justice institutions.
2. Demonstrate proficiency in probation, parole and correctional institutional methods.
3. Coordinate with human services and other public service entities.
4. Manipulate spreadsheets and compute formulas with basic proficiency.

5. Communicate effectively in oral and written technical English appropriate for public service.
6. Explain theories of criminology.
7. Describe adult corrections institutions, community-based programs and restorative justice.
8. Explain relevant human services issues (human behavior, substance abuse) and problem-solving methods.
9. Possess competitive entry-level skills for employment and promotion in the field of corrections.

Culinary Arts

Lucy Cuddy Hall (CUDY), Room 126, (907) 786-1487
www.uaa.alaska.edu/culinary (<http://www.uaa.alaska.edu/culinary>)

The Culinary Arts and Hospitality Division offers two degrees: an Associate of Applied Science (AAS) in Culinary Arts and a Bachelor of Arts (BA) in Hospitality Administration.

The culinary arts and hospitality administration programs provide students the opportunity to acquire the culinary skills, management skills and hospitality finesse needed to develop a career in the expanding hospitality and food service industry. An array of career possibilities is available to graduates in the areas of culinary production and professional management in restaurants, clubs, bakeries, hotels, hospitals, camps, catering facilities, institutions, tourism and other related operations.

The AAS generally takes five semesters of full-time study to complete (12-15 credits per semester). With additional culinary electives, students may focus their studies in culinary/bakery, management or hospitality. Through a study abroad agreement, students have the option of studying abroad for one semester at the prestigious Italian Culinary Institute of Florence (APICIUS).

The bachelor's degree generally takes four to five years of study to complete. In addition to General Education Requirements (GERs), students will complete a culinary core, a business core and then complete an emphasis study core in hospitality administration online, at UAA.

Students also have the option to complete the emphasis core in hospitality administration, convention and catering management, or tourism at the University of Nevada Las Vegas (UNLV) or Northern Arizona University (NAU). The study cores at UAA, UNLV or NAU require two semesters to complete; students have the option of attending UNLV or NAU or may complete the coursework via distance delivery. Please note that students may have to pay nonresident tuition for out-of-state study if they do not apply for National Student Exchange (NSE) (p. 15).

The capstone experience for the bachelor's degree is a 600-hour internship offered through UAA. The internship provides hands-on hotel and restaurant operations management experience during the fourth or fifth year. Arranged by the department, internships are paid work experiences at an approved site.

Programs of Study

Associate of Applied Science

- AAS in Culinary Arts (p. 323)

Bachelor of Arts

- BA in Hospitality Administration (p. 324)

Faculty

Anne Bridges, Professor, abridges2@alaska.edu

Timothy Doeblar, Director/Professor, twdoebler@alaska.edu

Naomi Everett, Assistant Professor, neverett@alaska.edu

Amy Green, Professor, amgreen5@alaska.edu

Vern Wolfram, Assistant Professor, vawolfram@alaska.edu

Associate of Applied Science in Culinary Arts

The culinary arts program produces graduates who are not just prepared for entry-level work positions in the rapidly expanding and varied food service, hospitality and tourism industry, but also graduates who can quickly advance in career opportunities because of their formal training and education.

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Advising

Call the Culinary Arts Department at (907) 786-1487 for an appointment with a faculty advisor to plan a personal program of study.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the Program Requirements below.

Program Requirements

Full-time and part-time students must successfully complete the 12-credit core curriculum as a prerequisite to enrolling in culinary and bakery skill development laboratory courses. Each core CA course must be completed with a grade of C or higher before students can enroll in program courses.

Code	Title	Credits
Core Courses *		
CA A101	The Hospitality Industry: Careers, Trends, and Practices	2
CA A104	Sanitation	2
CA A107	Cost Control	3
CA A110	Quantity Food Purchasing	2

CA A119	Principles of Nutrition	3
Total Credits		12

* *WRTG A111 and MATH A055 with a minimum grade of C are prerequisites and must be completed before enrolling in the above Culinary Arts courses. Appropriate SAT, ACT or UAA-approved math placement test scores may be used in lieu of MATH A055.*

Code	Title	Credits
Program Courses		
CA A103	Culinary Skill Development Laboratory	4
CA A111	Bakery Skill Development Laboratory	4
CA A201	A la Carte Kitchen	4
CA A202	Advanced Bakery	4
CA A223	Catering Management	2
CA A224	Hospitality Service	3
CA A230	Foodservice Management	3
Complete 9 credits from the following:**		9
ACCT A101	Principles of Financial Accounting I	
ACCT A102	Principles of Financial Accounting II	
ART A105	Beginning Drawing	
ART A160	Art Appreciation	
ART A224	Beginning Photography	
BA A151	Business Foundations	
BA A166	Entrepreneurship and Small Business Management	
BA/JUST A241	Business Law I	
CA A114	Beverage Management	
CA A225	Hospitality Concept Design	
CA A295	Foodservice Internship	
DN A151	Nutrition Through the Life Cycle	

** *Other APICIUS (Study Abroad), Accounting, Business, Culinary Arts or Nutrition courses may be considered for credit in the elective area by academic petition. See program academic advisor for prior approval.*

A total of 60 credits is required for the degree.

Program Student Learning Outcomes

Graduates are able to:

- Apply theories and concepts of baking and implement techniques to operate or function in a commercial bakery.
- Apply theories and concepts of cooking and implement techniques to operate or function in a commercial kitchen.
- Identify sanitation and safety codes and procedures necessary to maintain a safe food service facility.

- Analyze food cost and implement necessary controls to maintain costs and ensure profitability.
- Demonstrate the ability to use human resource management and facility operation management concepts to ensure safety, customer service and profitability.

Bachelor of Arts in Hospitality Administration

The Hospitality Administration program produces graduates who are not only prepared for entry-level work positions in the rapidly expanding and varied foodservice, hospitality and tourism industry, but also who can confidently advance to middle- and upper-level management opportunities because of their formal training and education. Upper division courses (e.g., those at the 300 and 400 level) are offered online to afford maximum flexibility for enrolled students.

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Advising

Advising is mandatory for this program. Contact the Culinary Arts and Hospitality Department at (907) 786-1487 or uaa_chef@alaska.edu for an appointment with a faculty advisor to plan a personal program of study.

Students are highly encouraged to coordinate their course selection with the program academic advisor. Some courses that may fulfill General Education Requirements and baccalaureate requirements are prerequisites to required business core courses.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86). A minimum of 3 credits of GERs must be at the 300 or 400 level to meet the upper-division credit requirements for this degree.
- Complete the major requirements below.

Major Requirements

There are three emphasis study core options in this degree program. In addition to GERs, students will complete a Culinary Core, a Business Core and then the Hospitality Core. To meet the prerequisites, the above courses must be completed in sequence. The Culinary and the Business Core must be completed as prerequisites to the Hospitality Core. Students must maintain a minimum cumulative GPA of 2.5 in the program. Students are required to plan their course of study with a program advisor. All HA courses are available online.

Code	Title	Credits
Culinary Core		
CA A101	The Hospitality Industry: Careers, Trends, and Practices	2

CA A103	Culinary Skill Development Laboratory	4
CA A104	Sanitation	2
CA A107	Cost Control	3
CA A110	Quantity Food Purchasing	2
CA A111	Bakery Skill Development Laboratory	4
CA A201	A la Carte Kitchen	4
CA A224	Hospitality Service	3
CA A225	Hospitality Concept Design	3
Business Core		
ACCT A201	Principles of Financial Accounting	3
ACCT A202	Principles of Managerial Accounting	3
BA/JUST A241	Business Law I	3
BA A300	Organizational Theory and Behavior	3
BA A343	Principles of Marketing	3
BA A361	Human Resource Management	3
BA A381	Consumer Behavior and Relationship Management	3
BA A388	Globalization and Business Environment	3
BA A463	Branding and Content Marketing Strategies	3
CIS A110	Computer Concepts in Business	3
STAT A200	Elementary Statistics	3
Hospitality Core		
HA A301	Advanced Hospitality Administration	3
HA A305	Front Desk Operations	3
HA A310	Hospitality Financial Management	3
HA A401	Hotel Facilities and Operations	3
HA A405	Hospitality Leadership and Ethics	3
HA A410	Hospitality Marketing	3
HA A495	Hospitality Administration Internship	6

A minimum of 121 credits is required for the degree of which 42 credits must be upper division. Of those 42 upper-division credits, a total of 24 credits must be completed in residence at UAA.

Program Student Learning Outcomes

Graduates are able to:

- Apply theories and concepts of baking and cooking and implement necessary techniques to operate or function in a commercial kitchen and bakery.
- Demonstrate ability to practice concepts of customer service and operate front desk operations for lodging venues.

- Analyze the food, beverage and lodging cost-control cycle and accounting practices, and implement controls to maintain costs and ensure profitability.
- Demonstrate the ability to implement sales, marketing and promotion, and utilize resources to develop and implement marketing plans for food service, lodging and tourism venues.
- Discuss the importance of the manager's role and ethics associated with executive management and how they lead and inspire staff to achieve mission and goals.
- Identify health, building, and fire codes and implement requirements to maintain a safe hospitality environment.

Industrial Process Instrumentation

Kenai Peninsula College (KPC)

156 College Road, Soldotna, AK 99669, (907) 262-0330 or (877) 262-0330

www.kpc.alaska.edu (<http://www.kpc.alaska.edu>)

Advising for this program is only available from KPC faculty. Please call (907) 262-0330 or (877) 262-0330 for more information.

Industrial process instrumentation is a specialized technical degree. Strong math and science skills are emphasized. Students must work closely with advisors in order to complete this program in two years. A fifth semester of coursework may be necessary.

Students are prepared for employment as instrument technicians. Instrument technicians are responsible for the repair, maintenance, adjustment and calibration of automatic controls used in refineries, chemical plants, pipelines, oil and gas production facilities, food processing facilities, and other industries where automatic control is used.

Program of Study

Associate of Applied Science

- AAS in Industrial Process Instrumentation (p. 325)

Faculty

Darrell Ellis, Assistant Professor, dewllis@alaska.edu

Henry Haney, Associate Professor, hwhaney@alaska.edu

Rich Kochis, Assistant Professor, rkochis@alaska.edu

Jeff Laube, Assistant Professor, jlaube@alaska.edu

Associate of Applied Science in Industrial Process Instrumentation

This program is delivered only through Kenai Peninsula College.

Admission Requirements

- Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).
- All students are required to take CIS A105 or CIS A110 or possess equivalent knowledge prior to entering this degree program.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83) (15 credits).
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
Oral Communication		
COMM A111	Fundamentals of Oral Communication	3
or COMM A235	Small Group Communication	
or COMM A241	Public Speaking	
Written Communication		
WRTG A111	Writing Across Contexts	3
WRTG A212	Writing and the Professions	3
Mathematics		
MATH A105	Intermediate Algebra	3
Natural Science		
PHYS A115 & A115L	Physical Science and Physical Science Lab	4
or PHYS A123 & A123L	College Physics I and College Physics I Laboratory	
CHEM A103 & A103L	Introduction to General Chemistry and Introduction to General Chemistry Laboratory	4
or CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	
Program Courses		
EDD A288		0-3
or PETR A155	Process Industry Basics	
ET A101	Basic Electronics: DC Circuits	4
ET A102	Basic Electronics: AC Circuits	4
ET A126	Digital Electronics	4
ET A175	Technical Introduction to Computing Systems	3
ET A240	Computer Systems Interfacing	3
ET A241	Digital Control Systems	3
ET A246	Electronic Industrial Instrumentation	3
PETR A240	Industrial Process Instrumentation III	3
PETR A244	Industrial Process Instrumentation IV	3
PRT A130	Process Technology I: Equipment	4
PRT A140	Industrial Process Instrumentation I	3
PRT A144	Industrial Process Instrumentation II	3

Complete 3-4 credits from the following:

3-4

CNT A170	CCNA 1
CS A109	Computer Programming (Languages Vary)
ET A243	Programmable Logic Controllers
PRT A230	Process Technology II: Systems
PRT A250	Process Troubleshooting
Total Credits	63-67

A total of 66-68 credits is required for the degree.

Program Student Learning Outcomes

Graduates of the UAA Industrial Process Instrumentation program will have the ability to:

- Read P & ID drawings and piping isometric drawings.
- Enter and print data in a spreadsheet program and enter and edit text using a word processor.
- Predict the output from a pneumatic or electronic transmitter for a given process input condition.
- Predict the effect of changes in gain or integral time on the dynamic behavior of closed-loop control.
- Describe the techniques for troubleshooting an orifice meter and flow control loop using either electronic or pneumatic equipment.
- Correctly interpret RTD or thermocouple output values as process temperatures.
- Correctly predict the voltage drops in a series connected current loop or a parallel connected voltage loop.
- Correctly implement a set-reset function using Boolean logic, TTL circuits or relay logic.
- Correctly distinguish between data transmitted by analog signals and data transmitted by digital signals.
- Identify typical pumps, compressors, transmitters and similar components.
- Communicate technical issues to peers both in writing and orally.
- Demonstrate punctuality and responsibility suitable to workplace employment.

Industrial Technology

Prince William Sound College
303 Lowe St., Valdez, AK 99686
pwsc.alaska.edu

Industrial Technology provides opportunities for students to learn the information and obtain job skills needed to pursue careers as a Millwright. A professional Millwright is highly skilled in precision instrumentation, welding, blue print reading, turbines, generators, rigging, conveyor systems, safety and much more. Millwrights are experts at installing, maintaining and repairing all sizes of industrial machinery. The Millwright program at PWSC trains students in each of these areas and is based on a curriculum certified by the National Center for Construction Education and Research (NCCER), a nationally recognized provider of technical training. Students can earn

an Occupational Endorsement Certificate in Millwright in order to be prepared for entry-level positions, or can position themselves for career advancement by going on to earn an Associate of Applied Science or Bachelor of Science degree in Technology.

Program of Study

Occupational Endorsement Certificate

- OEC in Millwright (p. 327)

Associate of Applied Science

- AAS in Industrial Technology (p. 327)

Faculty

Dennis Eastman, Assistant Professor of Millwright,
djeastman@alaska.edu

Sharry Miller, Assistant Director of Academic Affairs PWSC and Safety
Instructor, semiller2@alaska.edu

Occupational Endorsement Certificate in Millwright

This program is delivered only through Prince William Sound College.

Admission Requirements

Satisfy the Application and Admission Requirements for Occupational Endorsement Certificates. (p. 53)

Graduation Requirements

- Satisfy the General University Requirements for Occupational Endorsement Certificates. (p. 82)
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
ITEC A101	Hazwoper 24 Hour	1.5
ITEC A111	Millwright Level I	4
ITEC A112	Millwright Level II	4
ITEC A125	Confined Space Awareness	0.5
ITEC A211	Millwright Level III	5
ITEC A212	Millwright Level IV	5
ITEC A213	Millwright Level V	5
Total Credits		25

A total of 25 credits is required for the certificate.

Students graduating with an Occupational Endorsement in Millwright will be able to:

- Perform job related tasks following industry-recognized safety practices and techniques;
- Analyze, set-up, and operate mechanical equipment to perform efficiently and accurately;

- Demonstrate professional behaviors and attitudes when working alone or as a member of a team; and
- Clearly communicate technical information and data verbally, in writing, mathematically, and visually when required to complete job assignments.

Associate of Applied Science in Industrial Technology

Admission to this program is currently suspended. Contact Prince William Sound College for more information.

Occupational Safety and Health

University Center (UC), Room 130, (907) 786-6423

www.uaa.alaska.edu/osh (<http://www.uaa.alaska.edu/cdt>)

Occupational Safety and Health (OSH) professionals protect people, property and the environment, and they are in high demand. The OSH program provides comprehensive preparation for individuals to become highly-trained safety professionals in Alaska and nationwide. These professionals manage, research, train and consult on safety, health and environmental issues for industry, government, labor and education.

Safety professionals

- Anticipate, identify, and evaluate hazardous conditions and practices.
- Develop hazard control designs, methods, procedures and programs.
- Implement, administer and advise others on hazard controls and hazard control programs.
- Measure, audit and evaluate the effectiveness of hazard controls and hazard control programs.
- Apply methods and techniques of loss prevention and loss control.

(From ASSE- What Safety Professionals Do)

Safety professionals find high-paying jobs in oil and gas, mining, insurance, general industry, construction, maritime, transportation and the government.

The 2-year Associate of Applied Science (AAS) in OSH prepares individuals for entry-level safety positions. Experienced safety professionals may also use the degree to qualify for managerial positions and nationally-recognized safety certifications.

The 4-year Bachelor of Science (BS) in OSH prepares individuals to become supervisors and managers in safety-related positions in a wide array of industries.

Courses in the OSH program reflect the multidisciplinary expertise required of safety professionals. Included are all safety courses required by the Accreditation Board for Engineering and Technology (ABET). Coursework also includes training methods, psychology, biology, ethics, regulations and standards, industrial hygiene, health, physics, and leadership.

The AAS satisfies requirements for the first two years of the BS. Most of the courses for the AAS are delivered both online and face-to-face.

The upper division courses for the BS are only offered online. Both in-person and telephone advising is available; the advising phone number is 907-786-6423.

All students should meet with an academic advisor prior to their first semester and each subsequent semester to review their academic status and plan future courses. Students are encouraged to consult with the program advisor for assistance in designing their course of study to ensure all prerequisites have been met and that university and major degree requirements are understood and followed.

Program of Study

Associate of Applied Science

- AAS in Occupational Safety and Health (p. 328)

Bachelor of Science

- BS in Occupational Safety and Health (p. 329)

Faculty

Al Grant, Assistant Professor, argrant2@alaska.edu

Joel Condon, Director / Associate Professor, jcondon1@alaska.edu

Associate of Applied Science in Occupational Safety and Health

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Advising

Meet with an advisor to complete the advising interview checklist. Students must contact the OSH department at (907) 786-6423 prior to registering for OSH courses.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83). The required support courses listed below may also be used to satisfy General Course Requirements.
- Achieve a grade of C or better in all courses required for the degree.

Required Support Courses

Code	Title	Credits
BIOL A100	Human Biology	3-4
or BIOL A102	Introductory Biology	
or BIOL A111	Human Anatomy and Physiology I	
CHEM A103	Introduction to General Chemistry *	3
CHEM A103L	Introduction to General Chemistry Laboratory *	1

COMM A111	Fundamentals of Oral Communication *	3
or COMM A235	Small Group Communication	3
or COMM A237	Interpersonal Communication	
or COMM A241	Public Speaking	
WRTG A111	Writing Across Contexts	3
WRTG A212	Writing and the Professions	3
MATH A151	College Algebra for Calculus (or higher level MATH course) *	4
Total Credits		20-21

Program Requirements

Code	Title	Credits
FIRE A105	Fire Prevention	3
OSH A101	Introduction to Occupational Safety and Health	3
OSH A108	Injury Prevention and Risk Management (Or advisor approved course)	3
OSH A111	Occupational Safety Training Needs and Methods	3
OSH A120	Safety Program Management and Recordkeeping	3
OSH A160	Fundamentals of Industrial Hygiene	3
OSH A201	Hazard Control: Inspections, Audits and Investigations	3
OSH A211	Safety Management Systems	4
OSH A215	Environmental Issues for Safety and Health Professionals	3
OSH A230	Principles of Ergonomics	3
OSH A240	Workplace Monitoring: Instrumentation and Calibration	3
OSH A250	Hazardous Materials Operations	3
Elective		3
OSH A390	Selected Topics in Occupational Safety and Health	40
TECH A295	Technical Internship	
Advisor-approved course		
Total Credits		40

* May satisfy General Education Requirements (GERs).

A minimum of 60 credits is required for the degree.

1. Recognize, evaluate and recommend control strategies for common hazardous conditions and unsafe work practices.
2. Describe the fundamental aspects of occupational safety: industrial hygiene, environmental science, fire science, hazardous materials and ergonomics.
3. Develop safety, health and environmental programs.

4. Apply adult learning theory to safety training methodologies.
5. Identify and apply applicable safety and health standards.

Bachelor of Science in Occupational Safety and Health

Admission Requirements

Satisfy the Application and Admission Requirements for Baccalaureate Programs (p. 53).

Advising

Meet with an advisor to complete the advising interview checklist. Students must contact the OSH department at (907) 786-6423 prior to registering for OSH courses.

Graduation Requirements

- Satisfy the General University Requirements for Baccalaureate Degrees (p. 85).
- Complete the General Education Requirements for Baccalaureate Degrees (p. 86).
- In order to receive the Bachelor of Science in Occupational Safety and Health, students must achieve a grade of C or better in all courses required for the degree.
- Complete the major requirements below.

Major Requirements

Code	Title	Credits
Foundational Courses		
AKNS A201	Alaska Native Perspectives *	3
Complete one of the following:		3-4
BIOL A100	Human Biology	
BIOL A102	Introductory Biology *	
BIOL A111	Human Anatomy and Physiology I *	
CHEM A103	Introduction to General Chemistry *	3
CHEM A103L	Introduction to General Chemistry Laboratory *	1
JPC A204	Media Literacy *	3
JPC A362	Principles of Strategic Communications	3
MATH A151	College Algebra for Calculus *	4
WRTG A212	Writing and the Professions	3
Complete one of the following:		3
PHIL A303	Environmental Ethics	
PHIL A304	Business Ethics	
PHIL A305	Professional Ethics *	
PHYS A123	College Physics I *	3
Complete one of the following		3
PSY A111	Introduction to Psychology *	

PSY A200	Introduction to Behavior Analysis *	
STAT A200	Elementary Statistics *	3
TECH A305	Applied Leadership for Technicians	3
Core Courses		
FIRE A105	Fire Prevention	3
OSH A101	Introduction to Occupational Safety and Health	3
OSH A108	Injury Prevention and Risk Management	3
OSH A111	Occupational Safety Training Needs and Methods	3
OSH A120	Safety Program Management and Recordkeeping	3
OSH A160	Fundamentals of Industrial Hygiene	3
OSH A201	Hazard Control: Inspections, Audits and Investigations	3
OSH A211	Safety Management Systems	4
OSH A215	Environmental Issues for Safety and Health Professionals	3
OSH A230	Principles of Ergonomics	3
OSH A240	Workplace Monitoring: Instrumentation and Calibration	3
OSH A250	Hazardous Materials Operations	3
OSH A305	Incident Investigation and Analysis	3
OSH A310	Human Factors	3
OSH A360	Advanced Industrial Hygiene	3
OSH A375	Process Safety Management	3
OSH A405	Construction Industry Safety Management	3
OSH A420	Legal Aspects of Safety	3
OSH A450	Risk Management for Safety and Health	3
Complete 9 credits of electives		9
OSH A390	Selected Topics in Occupational Safety and Health	
OSH A495	Advanced Occupational Safety and Health Internship	
Capstone		
OSH A460	Economic Value of Safety	3
Total Credits		108-109

* May satisfy General Education Requirements (GERs).

A total of 120 credits is required for the degree.

1. Anticipate, recognize, evaluate, and develop control strategies for hazardous conditions and unsafe work practices.

2. Apply the fundamental aspects of occupational safety: industrial hygiene, environmental science, fire science, hazardous materials, ergonomics and human factors.
3. Design, implement, and evaluate safety, health, and environmental programs.
4. Apply adult learning theory to the design and delivery of safety training programs.
5. Interpret and apply applicable standards, regulations, and codes.
6. Conduct incident/accident investigations and analyses.
7. Evaluate and apply business and risk management concepts.

Petroleum Technology

Kenai Peninsula College (KPC), Kenai River Campus
156 College Road, Soldotna, AK 99669, (907) 262-0300 or (877) 262-0330
www.kpc.alaska.edu (<http://www.kpc.alaska.edu>)

Kenai Peninsula College offers an Undergraduate Certificate in Petroleum Technology. The certificate provides specific training in petro/chemical plant operations.

Program of Study

Undergraduate Certificate

- Certificate in Petroleum Technology (p. 330)

Faculty

Darrell Ellis, Assistant Professor, dwellis@alaska.edu
Henry Haney, Associate Professor, hwhaney@alaska.edu
Rich Kochis, Assistant Professor, rkochis@alaska.edu
Jeff Laube, Assistant Professor, jlaube@alaska.edu

Undergraduate Certificate in Petroleum Technology

This program is delivered only through Kenai Peninsula College.

Admission Requirements

Satisfy the Application and Admission Requirements for Undergraduate Certificate Programs (p. 53).

Advising

Advising for this program is available from the petroleum technology faculty at Kenai Peninsula College. Please call (907) 262-0330 or (877) 262-0330 for more information.

Graduation Requirements

- Satisfy the General University Requirements for Undergraduate Certificates (p. 82).
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
WRTG A111	Writing Across Contexts	3
or WRTG A110	Introduction to College Writing	
MATH A105	Intermediate Algebra	3
PRT A101	Introduction to Process Technology	3
PRT A130	Process Technology I: Equipment	4
PRT A140	Industrial Process Instrumentation I	3
PRT A144	Industrial Process Instrumentation II	3
PRT A160	Oil and Gas Exploration and Production I	3
PRT A230	Process Technology II: Systems	4
PRT A231	Process Technology III: Operations	4
or ET A101	Basic Electronics: DC Circuits	
or ET A126	Digital Electronics	
PRT A250	Process Troubleshooting	3
Total Credits		33

A total of 33 credits is required for the certificate.

Program Student Learning Outcomes

The graduates of the UAA Petroleum Technology program will have the ability to:

- Identify various process technology industries.
- Identify federal and state agencies and regulations that impact process industries.
- Calculate various process equipment theory results.
- Explain various process instrumentation theories.
- Identify various process instrumentation and the uses of the instrumentation in control loops.
- Sketch accurate piping and instrumentation diagrams (P&ID's).
- Develop and compose process procedures.
- Explain Outside Operator and Board Operator responsibilities and duties.
- Monitor a process, troubleshoot problems, and respond appropriately.
- Explain quality concepts, tools, and methods used in the process industries.

Process Technology

Kenai Peninsula College (KPC), Kenai River Campus
156 College Road, Soldotna, AK 99669, (907) 262-0330 or (877) 262-0330
www.kpc.alaska.edu (<http://www.kpc.alaska.edu>)

Anchorage Extension Site (AES)

University Center (UC), Room 118, (907) 786-6421

Advising for this program is only available from the Process Technology Department faculty at KPC.

The Associate of Applied Science in Process Technology is delivered by KPC and is coordinated collaboratively between UAA and the University of Alaska Fairbanks.

This degree is designed to provide education and training that will enable individuals to obtain employment in the industries that use and control mechanical, physical or chemical processes to produce a final product. In Alaska this includes the process industries of oil and gas production, chemical manufacturing, petroleum refining, power generation and utilities, water and wastewater treatment, and seafood and other food processing.

Program of Study**Associate of Applied Science**

- AAS in Process Technology (p. 331)

Faculty

Rick Adams, Assistant Professor, rhadams@alaska.edu

Darrell Ellis, Assistant Professor, dwellis@alaska.edu

Henry Haney, Associate Professor, hwhaney@alaska.edu

Jeff Laube, Assistant Professor, jlaube@alaska.edu

Associate of Applied Science in Process Technology

This program is delivered only through Kenai Peninsula College.

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Students who apply to the Process Technology AAS are admitted in a pre-major status. The process for advancement to major status requires completion of the following steps:

1. Complete an advising session with a PRT faculty advisor.
2. Complete the following courses with a grade of "C" or better:

Code	Title	Credits
WRTG A111	Writing Across Contexts	3
MATH A105	Intermediate Algebra (or any higher-level GER mathematics course)	3
PRT A101	Introduction to Process Technology	3
PHYS A115 & A115L or PHYS A123 & A123L	Physical Science and Physical Science Lab and College Physics I and College Physics I Laboratory	4

3. Completion of Change of Major Form from Pre-Major to Major status, signed by PRT faculty advisor.

Advising

Students are encouraged to meet with a faculty advisor in the Process Technology program prior to registering for Process Technology courses. Advising is required to move to major status and to complete the AAS in Process Technology.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the Program Requirements below.

Program Requirements

Code	Title	Credits
Mathematics		
Select one of the following:		3-4
MATH A105	Intermediate Algebra *	
MATH A151	College Algebra for Calculus *	
Any course for which MATH A105 or MATH A151 is a prerequisite		
Computer Literacy		
CIS A105	Introduction to Personal Computers and Application Software	3
or CIS A110	Computer Concepts in Business	
Chemistry		
CHEM A103 & A103L	Introduction to General Chemistry and Introduction to General Chemistry Laboratory (or higher level)	4
Physics		
Select one of the following:		4
PHYS A115 & A115L	Physical Science and Physical Science Lab	
PHYS A123 & A123L	College Physics I and College Physics I Laboratory *	
Core Courses		
PRT A101	Introduction to Process Technology	3
PRT A110	Introduction to Process Safety, Health and Environmental Awareness	3
PRT A130	Process Technology I: Equipment	4
PRT A140	Industrial Process Instrumentation I	3
PRT A144	Industrial Process Instrumentation II	3
PRT A230	Process Technology II: Systems	4

PRT A231	Process Technology III: Operations	4
PRT A250	Process Troubleshooting	3
PRT A255	Quality Concepts for the Process Industry	1
Advisor-approved Applied Technology Electives		9
May be chosen from:		
Electronics Technology (ET)		
Industrial Process Instrumentation (PETR, ET, PRT)		
Occupational Safety and Health (OSH)		
Process Technology (PRT)		
Technology Internship (TECH)		

* May be used to satisfy AAS General Course Requirements.

A total of 60 credits is required for the degree.

Program Student Learning Outcomes

Students graduating with an Associate of Applied Science in Process Technology will be able to:

- Identify process technology industries.
- Identify federal and state agencies and regulations that impact process industries.
- Calculate various process equipment theory results.
- Explain various process instrumentation theories.
- Explain various process instrumentation and the uses of the instrumentation in control loops.
- Sketch accurate piping and instrument diagrams (P&IDs).
- Develop and compose process procedures.
- Explain Outside Operator and Board Operator responsibilities and duties.
- Monitor a process, troubleshoot problems, and respond appropriately.
- Explain quality concepts, tools, and methods used in the process industries.

Refrigeration and Heating Technology

Matanuska-Susitna College

8295 East College Drive (P.O. Box 2889), Palmer, AK 99645, (907) 745-9774

matsu.alaska.edu/degree-programs/refrigeration-heating (<http://matsu.alaska.edu/degree-programs/refrigeration-heating>)

Matanuska-Susitna College offers four occupational endorsement certificates (OECs), one undergraduate certificate and an Associate of Applied Science (AAS) in refrigeration and heating. Satisfactory completion of the four OECs qualifies a student for the Undergraduate

Certificate in Refrigeration and Heating Technology. The AAS may be earned by obtaining the undergraduate certificate and successfully completing the General University Requirements and General Course Requirements (GCRs) for an associate's degree. A student satisfactorily completing the requirements for a certificate or the degree will possess a background in heating, air-conditioning, applied physics, mathematics, and electricity, and the technical skills required to diagnose and repair modern commercial and residential heating, refrigeration, air-conditioning and ventilation systems.

All students enrolling in the refrigeration and heating program must take a standardized placement test in reading, writing and mathematics. The faculty place heavy emphasis on student preparation for entry-level job skills.

Professional tests related to the industry and leading to industry-recognized certifications are administered as part of this program. If possible, additional training may take place on the job to provide a student with work-related experience.

Programs of Study

Occupational Endorsement Certificates

- OEC in Commercial Refrigeration Systems (p. 332)
- OEC in Residential and Light Commercial Heating and Ventilation (p. 333)

Undergraduate Certificate

- Certificate in Refrigeration and Heating Technology (p. 334)

Associate of Applied Science

- AAS in Refrigeration and Heating Technology (p. 334)

Faculty

John Kirby, Assistant Professor, jkirby4@alaska.edu

Dan Mielke, Assistant Professor, dmmielke@alaska.edu

Occupational Endorsement Certificate in Commercial Refrigeration Systems

This program is delivered only through Matanuska-Susitna College.

Admission Requirements

Satisfy the Application and Admission Requirements for Occupational Endorsement Certificate Programs (p. 53).

Advising

Students are urged to meet with a faculty advisor prior to enrollment in RH classes. Certain courses require prerequisites or faculty permission. See an advisor for information on the recommended course sequence.

Graduation Requirements

- Satisfy the General University Requirements for Occupational Endorsement Certificates (p. 82).
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
RH A101	Refrigeration and Air Conditioning Fundamentals	4
RH A105	Electrical Circuits for Refrigeration and Heating I	3
RH A122	Refrigeration and Air Conditioning	4
RH A126	Electrical Circuits for Refrigeration and Heating II	3
RH A132	Troubleshooting for HVAC/R Systems	3
Total Credits		17

A total of 17 credits is required for the certificate.

Program Student Learning Outcomes

Students graduating with the Occupational Endorsement Certificate in Commercial Refrigeration Systems will be able to:

- Apply the fundamental laws of physics related to the air conditioning and refrigeration industry.
- Understand and describe the function of individual components that make up refrigeration systems.
- Work safely with tools, torches, electricity, refrigerants, and other equipment and materials associated with refrigeration work.
- Follow work practices that are environmentally responsible.
- Obtain employment as an entry-level refrigeration technician and be able to advance professionally.
- Work effectively with customers, employers, and co-workers.
- Systematically troubleshoot refrigeration systems.
- Apply municipal, state, and national mechanical codes to decisions involving the design, installation, operation, and maintenance of refrigeration systems.

Occupational Endorsement Certificate in Residential and Light Commercial Heating and Ventilation

This program is delivered only through Matanuska-Susitna College.

Admission Requirements

Satisfy the Application and Admission Requirements for Occupational Endorsement Certificate Programs (p. 53).

Advising

Students are urged to meet with a faculty advisor prior to enrollment in RH classes.

Certain courses require prerequisites or faculty permission. See an advisor for information on the recommended course sequence.

Graduation Requirements

- Satisfy the General University Requirements for Occupational Endorsement Certificates (p. 82).
- Complete the Program Requirements below.

Program Requirements

Code	Title	Credits
RH A203	HVAC/R Basic Controls	3
RH A211	Customer Relations and Job Etiquette	1
RH A225	Heating Fundamentals and Forced Air Heat	4
RH A226	Commercial HVAC/R Systems	4
RH A228	Advanced Hydronic Heat Systems	4
Total Credits		16

A total of 16 credits is required for the certificate.

Program Student Learning Outcomes

Students graduating with an Occupational Endorsement Certificate in Residential and Light Commercial Heating and Ventilation will be able to:

- Apply the fundamental laws of physics to heating, ventilation, and air conditioning (HVAC) systems.
- Use mathematical skills required to succeed in HVAC trades.
- Describe the function of individual components that make up HVAC systems.
- Work safely with tools, torches, electricity, refrigerants, heating fuels, and other equipment and materials associated with HVAC work.
- Follow work practices that are environmentally responsible.
- Obtain employment as an entry-level HVAC technician and be able to advance professionally.
- Work effectively with customers, employers, and co-workers.
- Systematically troubleshoot HVAC systems.
- Apply municipal, state, and national mechanical codes to decisions involving the design, installation, operation, and maintenance of HVAC systems.

Undergraduate Certificate in Refrigeration and Heating Technology

This program is delivered only through Matanuska-Susitna College.

Admission Requirements

- Satisfy the Application and Admission Requirements for Undergraduate Certificate Programs (p. 53).
- Achieve an acceptable score on placement tests in reading, writing and mathematics.

Advising

Students are urged to meet with a faculty advisor prior to enrolling in RH courses.

Certain courses require prerequisites or faculty permission. See an advisor for information on the recommended course sequence.

Graduation Requirements

- Satisfy the General University Requirements for Undergraduate Certificates (p. 82).
- Complete the Program Requirements below.
- Pass all courses listed in core requirements before attempting any of the certificate requirement courses.

Program Requirements

Code	Title	Credits
Core Requirements		
RH A103	Technical Mathematics for Industrial Trades	3
RH A105	Electrical Circuits for Refrigeration and Heating I	3
RH A109	Principles of Thermodynamics	3
RH A209	Codes for HVAC/R	2
RH A211	Customer Relations and Job Etiquette	1
Certificate Requirements		
RH A101	Refrigeration and Air Conditioning Fundamentals	4
RH A122	Refrigeration and Air Conditioning	4
RH A126	Electrical Circuits for Refrigeration and Heating II	3
RH A132	Troubleshooting for HVAC/R Systems	3
RH A201	Commercial and Ammonia Refrigeration	4
RH A203	HVAC/R Basic Controls	3
RH A225	Heating Fundamentals and Forced Air Heat	4
RH A226	Commercial HVAC/R Systems	4

RH A228	Advanced Hydronic Heat Systems	4
RH A229	HVAC/R Control Systems	3
RH A232	HVAC/R Sheet Metal	3
Total Credits		51

A total of 51 credits is required for the certificate.

Licensure and/or Certification

Graduates of the Undergraduate Certificate in Refrigeration and Heating Technology are eligible to sit for the Environmental Protection Agency Section 608 National Certification Exam and the North American Technical Excellence entry level certification exam. Graduates of the program are also eligible for an institutional recommendation for the Unlimited Refrigeration Mechanical Administrator License from the Alaska Department of Business and Professional Licensing Section.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Student Learning Outcomes

Students graduating with a certificate in the Refrigeration and Heating Technology program will be able to:

- Apply the fundamental laws of physics related to the heating, ventilation, air conditioning and refrigeration (HVAC/R) industry.
- Use mathematical skills required to succeed in HVAC/R trades.
- Understand and describe the function of individual components that make up HVAC/R systems.
- Work safely with tools, torches, electricity, refrigerants, heating fuels, and other equipment and materials associated with HVAC/R work.
- Follow work practices that are environmentally responsible.
- Obtain employment as an entry-level HVAC/R technician and be able to advance professionally.
- Work effectively with customers, employers and co-workers.
- Systematically troubleshoot HVAC/R systems.
- Apply municipal, state and national mechanical codes to decisions involving the design, installation, operation and maintenance of HVAC/R systems.

Associate of Applied Science in Refrigeration and Heating Technology

This program is offered only through Matanuska-Susitna College.

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Students must achieve an acceptable score on placement tests in reading, writing and mathematics.

Advising

Students are urged to meet with a faculty advisor prior to enrolling in RH courses. See an advisor for information on the recommended course sequence.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83) (15 credits).
- Complete the Program Requirements below.
- Earn a cumulative GPA of 2.00 (C) or higher in required RH courses.

Program Requirements

Code	Title	Credits
RH A101	Refrigeration and Air Conditioning Fundamentals	4
RH A103	Technical Mathematics for Industrial Trades	3
RH A105	Electrical Circuits for Refrigeration and Heating I	3
RH A109	Principles of Thermodynamics	3
RH A122	Refrigeration and Air Conditioning	4
RH A126	Electrical Circuits for Refrigeration and Heating II	3
RH A132	Troubleshooting for HVAC/R Systems	3
RH A201	Commercial and Ammonia Refrigeration	4
RH A203	HVAC/R Basic Controls	3
RH A209	Codes for HVAC/R	2
RH A211	Customer Relations and Job Etiquette	1
RH A225	Heating Fundamentals and Forced Air Heat	4
RH A226	Commercial HVAC/R Systems	4
RH A228	Advanced Hydronic Heat Systems	4
RH A229	HVAC/R Control Systems	3
RH A232	HVAC/R Sheet Metal	3
Total Credits		51

A total of 66 credits is required for the degree.

Licensure and/or Certification

Graduates of the Associate of Applied Science in Refrigeration and Heating Technology are eligible to sit for the Environmental Protection Agency Section 608 National Certification Exam and the North American Technical Excellence entry level certification

exam. Graduates of the program are also eligible for an institutional recommendation for the Unlimited Refrigeration Mechanical Administrator License from the Alaska Department of Business and Professional Licensing Section.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Student Learning Outcomes

Students graduating with a degree in the Refrigeration and Heating Technology program will be able to:

- Apply the fundamental laws of physics related to the Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC/R) industry.
- Use mathematical skills required to succeed in HVAC/R trades.
- Understand and describe the function of individual components that make up HVAC/R systems.
- Work safely with tools, torches, electricity, refrigerants, heating fuels, and other equipment and material associated with HVAC/R work.
- Follow work practices that are environmentally responsible.
- Obtain employment as an entry level HVAC/R technician and be able to advance professionally.
- Work effectively with customers, employers, and co-workers.
- Systematically troubleshoot HVAC/R systems.
- Apply municipal, state, and national mechanical codes to decisions involving the design, installation, operation, and maintenance of HVAC/R systems.

Technology

Technology Career Specialty Programs

Kodiak College

117 Benny Benson Drive, Kodiak, AK 99615, (907) 486-4161 or (800) 486-7660

www.koc.alaska.edu (<http://www.koc.alaska.edu>)

The technology undergraduate certificate and Associate of Applied Science (AAS) are offered through Kodiak College. Advising for this program is only available at Kodiak College. Please contact Lorraine Stewart, coordinator, at (907) 486-1209 or lestewart@kodiak.alaska.edu.

The technology career specialty undergraduate certificate program provides entry-level skills in the specialized field of welding.

Programs of Study

Undergraduate Certificates

- Certificate in Welding (p. 336)

Associate of Applied Science

- AAS in Technology (p. 336)

Faculty

Undergraduate Certificate in Welding

This program is delivered only through Kodiak College.

For advising, please contact Lorraine Stewart, coordinator, at (907) 486-1209 or lestewart@kodiak.alaska.edu.

Students develop technical skills in various welding processes including shielded metal arc welding, gas metal arc welding, gas tungsten arc welding and plasma arc cutting. Students will also develop skills in metal fabrication and technical drawing. Upon completion of the certificate, students are prepared for entry-level welding technician positions. (See learning outcomes for the Welding emphasis of the AAS in Technology (p. 336).)

Admission Requirements

Satisfy the Application and Admission Requirements for Undergraduate Certificate Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Undergraduate Certificates (p. 82).
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
AET A101	Fundamentals of CADD for Building Construction	3-4
or CIS A105	Introduction to Personal Computers and Application Software	
PSY A153	Human Relations	3
or HUMS A155	Human Relations in the Workplace	
MATH A105	Intermediate Algebra (or any MATH course for which MATH A105 is a prerequisite)	3
OSH A101	Introduction to Occupational Safety and Health	3
WRTG A110	Introduction to College Writing	3
TECH A295	Technical Internship	1
WELD A112	Shielded Metal Arc Welding (SMAW)	3
WELD A114	Welding of High Strength Steels	3
WELD A157	Technical Drawings for Welders	3
WELD A190	Selected Topics in Welding Technology	3
Total Credits		28-29

A total of 30-31 credits is required for the certificate.

Associate of Applied Science in Technology

This program is delivered only through Kodiak College.

For advising, please contact Lorraine Stewart, coordinator, at (907) 486-1209 or lestewart@kodiak.alaska.edu.

The Associate of Applied Science in Technology offers career specialty concentrations in the following emphasis areas:

- Construction
- Occupational Safety and Health
- Welding

The Associate of Applied Science, Technology degree program is designed to provide entry-level skills, continuing education and advanced technical skills in several specialized fields including welding, construction, and safety. Applicants who qualify for the two-year program at Kodiak College may wish to seek advanced degrees in technology at UAA.

Students seeking a technical career in welding, construction or occupational safety will be well prepared as they complete the technology program. The comprehensive technology curriculum with applied math, science and technical writing components ensures student readiness for rewarding careers in a variety of technical fields.

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Advising

Advising for this program is only available from Kodiak College. Please call (907) 486-1209 for more information. Students are encouraged to meet with their academic advisor to coordinate program completion.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
General Requirements		
Select one of the following:		3
COMM A111	Fundamentals of Oral Communication	
COMM A235	Small Group Communication	
COMM A237	Interpersonal Communication	

COMM A241	Public Speaking	
WRTG A111	Writing Across Contexts	3
WRTG A212	Writing and the Professions	3
MATH A105	Intermediate Algebra (or any MATH course for which MATH A105 is a prerequisite)	3
Select one of the following:		4
CHEM A103 & A103L	Introduction to General Chemistry and Introduction to General Chemistry Laboratory (for Construction or OSH emphases only)	
CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory (for Construction or OSH emphases only)	
GEOL A111 & A111L	Physical Geology and Physical Geology Laboratory (for Construction emphasis only)	
PHYS A123 & A123L	College Physics I and College Physics I Laboratory	
Technology Core Requirements		
AET A101	Fundamentals of CADD for Building Construction	4
CIS A105	Introduction to Personal Computers and Application Software	3
ET A151	Basic Electricity for the Trades	4
OSH A101	Introduction to Occupational Safety and Health	3
OSH A250	Hazardous Materials Operations	3
PSY A153	Human Relations	3
TECH A101	Introduction to Technological Principles	3
Total Credits		39

Complete one of the following emphasis areas:

Code	Title	Credits
Construction		
AET A102	Methods of Building Construction	3
AET A123	Codes and Standards	3
AET A142	Mechanical and Electrical Technology	4
AET A231	Structural Technology	4
CM A201	Construction Project Management I	3
CM A205	Construction Safety	3
CM A213	Construction Civil Technology	4
TECH A295	Technical Internship	3
Total Credits		27

Code	Title	Credits
Occupational Safety and Health		
OSH A108	Injury Prevention and Risk Management	3
OSH A111	Occupational Safety Training Needs and Methods	3
OSH A120	Safety Program Management and Recordkeeping	3
OSH A180	Introduction to Industrial Hygiene	4
OSH A201	Hazard Control: Inspections, Audits and Investigations	3
OSH A211	Safety Management Systems	4
TECH A295	Technical Internship	2
Total Credits		22

Code	Title	Credits
Welding		
TECH A295	Technical Internship	3
WELD A112	Shielded Metal Arc Welding (SMAW)	3
WELD A114	Welding of High Strength Steels	3
WELD A157	Technical Drawings for Welders	3
WELD A161	Gas Metal Arc Welding (GMAW)	3
WELD A190	Selected Topics in Welding Technology (Approved topics)	7
Total Credits		22

A total of 62-66 credits is required for the degree.

Program Student Learning Outcomes

Students successfully completing the core of the Associate of Applied Science in Technology should expect to:

- Understand, describe and analyze the physical components and processes found in technical systems.
- Demonstrate skills in communication, computation and human relations applicable to personal and professional situations.
- Demonstrate and apply knowledge of physics, math and computers to technical fields
- Understand and apply safety practices.

Construction emphasis

The purpose of this degree emphasis is to produce capable graduates who can perform safely and efficiently in a construction environment. Graduates will be prepared to learn the specific needs of the industries that they serve and demonstrate abilities in:

- Documentation: Create, interpret and use construction drawings and other documents, and calculate quantities of material, labor, and equipment needed for a project.
- Human Resources: Define the roles, relationships, and responsibilities of the participants in the construction process, and understand employee relations and contract law.

- **Building Methods:** Define structural theories and physical principles affecting structural behavior in buildings and civil works. Define the elements of civil construction, soil mechanics, foundations, roads, and construction surveying. Define basic building systems, building equipment, materials, techniques and assemblies for construction.
- **Codes and Standards:** Interpret standard building codes for application in modern construction processes.
- **Construction Project Management:** Familiarity with effective contract administration methods to control, organize, and monitor construction projects.
- **Management Tools:** Utilize industry standard software for computer-aided drafting (CADD) and gain familiarity with estimating, scheduling and resource management.
- **Safety:** Apply knowledge of safety, health, and environmental issues related to construction activities.

Occupational Safety and Health emphasis

The purpose of this degree emphasis is to produce capable graduates who can plan for safe activities and direct safety programs in a variety of industrial settings. Graduates will be prepared to learn the specific needs of the industries that they serve and demonstrate the abilities to:

- Identify risks to life, health and property, and plan and implement strategies that prevent injuries.
- Develop, implement and manage safety programs that comply with government regulations, industry standards and best safety practices.
- Design and maintain company and personnel records related to safety activities, training and incidents.
- Perform hazard recognition and mitigation related to chemical and physical conditions in the workplace.
- Develop and implement a process of incident or injury investigation and properly collect, organize and analyze appropriate information to link root causes with observed effects.
- Prepare and present employee training modules and programs based on training needs assessments and properly prepare objectives and materials, and practice effective presentations.

Welding emphasis

The purpose of this degree emphasis is to produce capable graduates who can perform safely and efficiently in a welding environment. Graduates will be prepared to learn the specific needs of the industries that they serve and demonstrate:

- Technical and administrative skills required in today's metal fabrication and welding environments.
- Application of specifications and welding procedures to specific job tasks.
- Skills in welding and thermal cutting processes and familiarity with basic metallurgy theory.
- Competence in all-position welder qualification tests for two welding process and familiarity with other welding processes.
- Safe work habits by assessing hazards and using best practices to avoid exposure to risk of injury, and to avoid damaging equipment.

- Effective communication with other employees, customers, and management.

Veterinary Assisting

Matanuska-Susitna College

8295 East College Drive (P.O. Box 2889), Palmer, AK 99645, (907) 745-9774

<http://matsu.alaska.edu/degree-programs/veterinary-assisting-program>

A veterinary assistant plays a vital role within the veterinary profession. In the Veterinary Assisting Occupational Endorsement Certificate program, students learn how to assist and support the veterinarian and the veterinary technician in their daily tasks. Students will learn the fundamentals required for the care, treatment and management of both the animals as patients and people as clients. Students learn the fundamentals of good customer service, communication skills and the essentials of clerical responsibilities. They further learn the fundamental skills of proper handling, nutrition and nursing care for both large and small animals. Students are introduced to clinical patient management and laboratory procedures.

Program of Study

Occupational Endorsement Certificate

- OEC in Veterinary Assisting (p. 338)

Faculty

Karen Carpenter, Assistant Professor, klcarpenter@alaska.edu

Occupational Endorsement Certificate in Veterinary Assisting

This program is delivered only through Matanuska-Susitna College.

A veterinary assistant plays a vital role within the veterinary profession. In the Veterinary Assisting Occupational Endorsement Certificate program, students learn how to assist and support the veterinarian and the veterinary technician in their daily tasks. Students will learn the fundamentals required for the care, treatment and management of both the animals as patients and people as clients. Students learn the fundamentals of good customer service, communication skills and the essentials of clerical responsibilities. They further learn the fundamental skills of proper handling, nutrition and nursing care for both large and small animals. Students are introduced to clinical patient management and laboratory procedures.

Admission Requirements

Satisfy the Application and Admission Requirements for Occupational Endorsement Certificates (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Occupational Endorsement Certificates (p. 82).

- Complete the program requirements below with a minimum grade of C.

Program Requirements

Code	Title	Credits
VETT A101	Introduction to the Veterinary Profession	1
VETT A103	Veterinary Office Procedures	3
VETT A122	Basic Handling and Behavior: Small Animals	2
VETT A123	Basic Handling and Behavior: Large Animals	2
VETT A124	Introduction to Small Animals	3
VETT A125	Introduction to Large Animals	3
VETT A201	Veterinary Anatomy and Physiology	4
VETT A295	Veterinary Assistant Practicum	3
Total Credits		21

A total of 21 credits is required for the certificate.

Program Student Learning Outcomes

Upon completion of the occupational endorsement certificate, students will demonstrate:

- Knowledge of veterinary practice administration.
- Basic ability to handle and restrain large and small animals.
- Understanding of basic medical terminology.
- Introductory understanding of animal anatomy and physiology.
- Entry-level skills for laboratory procedures.
- Effective customer service and communication skills.

Welding and Nondestructive Testing Technology

Gordon Hartlieb Hall (GHH), Room 111, (907) 786-6475
www.uaa.alaska.edu/transportation (<http://www.uaa.alaska.edu/transportation>)

Kenai Peninsula College, Kenai River Campus
156 College Road, Soldotna, AK 99669, (907) 262-0330 or (877) 262-0330
www.kpc.alaska.edu (<http://www.kpc.alaska.edu>)

The welding and nondestructive testing technology program prepares students for employment in welding and/or nondestructive examination as entry-level technicians. A variety of career opportunities are available to welding technicians and nondestructive examination technicians. Both of these fields are utilized in construction, manufacturing and transportation industries throughout the world.

The UAA welding and nondestructive testing (NDT) program offers an Associate of Applied Science (AAS) in Welding and Nondestructive Testing Technology, and occupational endorsement certificates in welding, advanced welding and nondestructive testing technology.

Curriculum for the three occupational endorsement certificates is combined in the AAS. Kenai Peninsula College also offers an Undergraduate Certificate in Welding Technology.

Welding courses are designed to develop knowledge and skills in four main welding processes and three thermal cutting processes, as well as gain a wide range of technical knowledge in welding application, procedure/welder qualification, reading plans and specifications, and applied metallurgy. Welder qualification tests are administered as prescribed in AWS D1.1, API Standard 1104, or ASME IX welding codes.

Nondestructive testing technician students examine metallic components or weldments to locate and evaluate discontinuities by learning to apply liquid die penetrant (PT) magnetic particle (MD) eddy current (ET) radiographic (RT) and ultrasonic testing (UT) methods. Student qualification in each NDT method is based on general, specific and practical examinations administered as prescribed in the American Society for Nondestructive Testing (ASNT) Recommended Practice No. SNT-TC-1A.

Programs of Study

Occupational Endorsement Certificates

- OEC in Advanced Welding (p. 339)
- OEC in Nondestructive Testing Technology (p. 340)
- OEC in Welding (p. 340)

Undergraduate Certificate

- Certificate in Welding Technology (p. 341)

Associate of Applied Science

- AAS in Welding and Nondestructive Testing Technology (p. 342)

Faculty

Anchorage

Greg Russo, Instructor, grusso (grusso@alaska.edu)@alaska.edu (jqgoins@alaska.edu)
Eli Van Ringelstein, Instructor, evanringelstein@alaska.edu
James Rush, Instructor, jrush8@alaska.edu

Kenai

Jacob Keisling, Assistant Professor, jkeisling@alaska.edu

Occupational Endorsement Certificate in Advanced Welding

This Occupational Endorsement Certificate in Advanced Welding builds on foundational skills required for entry into the welding industry and prepares individuals for employment in pipe welding operations. Students gain knowledge of pipe fabrication, pipe welding and fitting processes. Courses in this certificate option are based on standards established by the American Welding Society and American Petroleum Institute.

Admission Requirements

Satisfy the Application and Admission Requirements for Occupational Endorsement Certificate Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Occupational Endorsement Certificates (p. 82).
- Pass two separate welding process qualification tests.
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
MATH A105	Intermediate Algebra	3
or any course for which MATH A105 is a prerequisite		
WELD A112	Shielded Metal Arc Welding (SMAW)	3
WELD A114	Welding of High Strength Steels	3
WELD A117	Pipe Fabrication	4
WELD A121	Pipe Welding Vertical-Down SMAW	4
WELD A174	Gas Tungsten Arc Welding (GTAW)	3
Total Credits		20

A total of 20 credits is required for this OEC.

Program Student Learning Outcomes

Upon completion of this OEC, students will demonstrate:

- Demonstrate hazard assessment and best safety practices.
- Demonstrate enhanced levels of technical skills in welding.
- Demonstrate intermediate knowledge of the interrelationship between metallurgy, welding and inspection processes.
- Demonstrate advanced forms of effective technical, oral, and written communication.
- Demonstrate application of advanced mathematical formulas and computations as applied in the welding and inspection fields.

Occupational Endorsement Certificate in Nondestructive Testing Technology

Nondestructive testing technology (NDT) students examine metallic components or weldments to locate and evaluate discontinuities by learning to apply liquid penetrant (PT), magnetic particle (MT), eddy current (ET), radiographic (RT) and ultrasonic (UT) test methods. Student qualification in each NDT method is based on general, specific and practical examinations administered as prescribed in the American Society for Nondestructive Testing (ASNT) Recommended Practice No. SNT-TC-1A.

Provides foundational skills required for entry into the nondestructive testing industry.

Admission Requirements

Satisfy the Application and Admission Requirements for Occupational Endorsement Certificate Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Occupational Endorsement Certificates (p. 82).
- Complete the Program Requirements below.
- Successfully pass at least two separate industry-recognized welder certifications.

Program Requirements

Code	Title	Credits
MATH A105	Intermediate Algebra (or any course for which MATH A105 is a prerequisite)	3
WELD A112	Shielded Metal Arc Welding (SMAW)	3
WELD A261	Ultrasonic Testing	4
WELD A262	General Nondestructive Testing	3
WELD A263	Radiographic Testing Safety	2
WELD A264	Radiographic Testing	4
Total Credits		19

A total of 19 credits is required for this OEC.

Program Student Learning Outcomes

Upon completion of this OEC, students will demonstrate:

- Demonstrate hazard assessment and best safety practices.
- Demonstrate entry-level technical skills in welding and nondestructive examination.
- Demonstrate technical knowledge of the interrelationship between metallurgy and inspection processes.
- Demonstrate advanced forms of effective oral and written communication.
- Demonstrate application of advanced mathematical computations as applied in the inspection and nondestructive examination fields.

Occupational Endorsement Certificate in Welding

This Occupational Endorsement Certificate (OEC) provides the foundational skills required for entry into the welding industry. Courses focus on SMAW, GMAW, GTAW and FCAW in all positions. The courses are aligned with standards established by the American Welding Society (AWS) and American the American Society for Mechanical Engineers (ASME). Additionally, each course is embedded within the AAS degree option, so students can transfer each of these

classes toward the Associates of Applied Science in Welding and Nondestructive Testing Technology.

Admission Requirements

Satisfy the Application and Admission Requirements for Occupational Endorsement Certificate Programs (p. 53).

Graduation Requirements

- Satisfy the General University Requirements for Occupational Endorsement Certificates (p. 82).
- Students must pass at least one industry-recognized welder certification.
- Pass one welding process qualification test.
- Complete the Program Requirements below.

Program Requirements

Code	Title	Credits
WRTG A110	Introduction to College Writing	3
WELD A101 or WELD A295	Gas and Arc Welding Welding & Nondestructive Testing Internship	3
WELD A112	Shielded Metal Arc Welding (SMAW)	3
WELD A157	Technical Drawings for Welders	3
WELD A161	Gas Metal Arc Welding (GMAW)	3
WELD A162	Flux Cored Arc Welding (FCAW)	3
Total Credits		18

A total of 18 credits is required for the OEC.

Program Student Learning Outcomes

Upon completion of this OEC, students will demonstrate:

- Demonstrate hazard assessment and best safety practices
- Demonstrate entry-level technical skills in welding
- Demonstrate introductory knowledge of the interrelationship between metallurgy and welding
- Demonstrate effective oral and written communication
- Demonstrate application of mathematical formulas as applied in the welding field

Undergraduate Certificate in Welding Technology

This program is delivered only through Kenai Peninsula College.

The one-year Undergraduate Certificate in Welding Technology provides students with specific training for structural and pipe welding certification. Students gain comprehensive training in the latest welding technology, blueprint reading, layout and fabrication. Graduates of this program will be prepared for employment as structural or pipe welders, and will have a solid welding background for many mechanical trades.

Experienced welders have the option of bypassing the first semester courses by successfully completing written and practical examinations on first semester work.

Admission Requirements

Satisfy the Application and Admission Requirements for Undergraduate Certificate Programs (p. 53).

Advising

Advising for this program is available from the Welding faculty at Kenai Peninsula College. Please call (907) 262-0330 or (877) 262-0330 for more information.

Students should consult the Anchorage or Kenai Welding faculty for assistance with course planning toward certifications.

Graduation Requirements

- Satisfy the General University Requirements for Undergraduate Certificates (p. 82).
- Complete the Program Requirements below.
- Complete certificate course requirements with a minimum cumulative GPA of 2.00.

Program Requirements

Code	Title	Credits
WRTG A111 or COMM A111 or WRTG A110	Writing Across Contexts Fundamentals of Oral Communication Introduction to College Writing	3
MATH A105	Intermediate Algebra (or any MATH course for which MATH A105 is a prerequisite)	3
PETR A155	Process Industry Basics	3
WELD A102	Gas Welding	2
WELD A103	Arc Welding	4
WELD A104	Arc Welding: Low-Hydrogen Electrodes	4
WELD A105	Pipe Welding	4
WELD A106	Pipe Certification	4
WELD A108 or WELD A109	Wire Welding TIG Welding	4
Total Credits		31

All students must pass structural and pipe certification tests before receiving the Undergraduate Certificate in Welding Technology.

A total of 31 credits is required for the undergraduate certificate.

Program Student Learning Outcomes

Students graduating with an Undergraduate Certificate in Welding Technology will be able to:

- Demonstrate competence in the oxy-acetylene cutting process.
- Demonstrate competence in the preparation of steel-plate certified groove welds.
- Demonstrate competence in the welding of steel-plate all position groove welds.
- Demonstrate competence in the oxy-acetylene cutting process of steel pipe (both with freehand and machine cutting).
- Demonstrate competence in the preparation of steel pipe to be welded with the stick-electrode process for common sizes of pipe used in industry.
- Demonstrate competence in the welding of steel pipe per Procedure KPC-I for testing and welds common schedules and sizes of pipe used in industry.
- Complete structural and pipe certification national testing standards.

Associate of Applied Science in Welding and Nondestructive Testing Technology

The Associate of Applied Science degree in Welding and Nondestructive Testing Technology is designed to prepare students for a career as a welding and/or nondestructive testing technician. Courses include hands-on applications of various welding and nondestructive testing processes. Students develop the skills and knowledge for employment within the oil and gas, mining, construction, maritime, fabrication, and manufacturing industries. The academic requirements of the program provide students with the written and oral communication skills needed for success. Additionally, if a student desires to continue their education, they may apply the A.A.S. coursework toward a B.S. in Applied Technologies Leadership. The courses within this program are based on a combination of industry standards that include: American Welding Society, American Petroleum Institute, American Society for Mechanical Engineers, and the American Society for Nondestructive Testing.

The welding courses within the AAS degree focus on all positions in SMAW, GTAW, GMAW, and FCAW. Students develop skills associated with pipe welding and also the related computational skills needed to be successful. Other processes associated with pipe, plate and various structural shapes are included in the courses.

The NDT courses embedded within the AAS degree provide students with extensive practice in testing and inspection methods. The program is recognized by the American Society for Nondestructive Testing (ASNT) and serves as the leading program in Alaska. Students gain hands-on experience in ultrasonic and radiographic testing methods as well as magnetic particle, eddy-current, and liquid penetrant.

Admission Requirements

Satisfy the Application and Admission Requirements for Associate Degree Programs (p. 53).

Advising

Students should consult the WELD faculty for assistance with course planning toward the AAS degree.

Graduation Requirements

- Satisfy the General University Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the General Course Requirements for Associate of Applied Science Degrees (p. 83).
- Complete the Program Requirements below.

Program Requirements

Code	Title	Credits
MATH A105	Intermediate Algebra (or any MATH course for which MATH A105 is a prerequisite)	3
WRTG A111	Writing Across Contexts	3
WRTG A212	Writing and the Professions	3
Additional AAS General Course Requirements		6
Select one of the following:		3-4
PHYS A101	Physics of Sports	
PHYS A115 & A115L	Physical Science and Physical Science Lab	
PHYS A123	College Physics I	
WELD A112	Shielded Metal Arc Welding (SMAW)	3
WELD A157	Technical Drawings for Welders	3
WELD A161	Gas Metal Arc Welding (GMAW)	3
WELD A162	Flux Cored Arc Welding (FCAW)	3
WELD A174	Gas Tungsten Arc Welding (GTAW)	3
WELD A261	Ultrasonic Testing	4
WELD A262	General Nondestructive Testing	3
WELD A263	Radiographic Testing Safety	2
WELD A264	Radiographic Testing	4
WELD A281	Welding Inspection and Code Review	3
WELD A287	Welding Metallurgy Applications	5
Select one of the following:		3-4
WELD A117	Pipe Fabrication	
WELD A190	Selected Topics in Welding Technology	
WELD A295	Welding & Nondestructive Testing Internship	
Total Credits		57-59

Pass three separate all-position welder qualification tests.

Pass two separate NDT method qualification tests.

A minimum of 62 credits is required for the degree.

Program Student Learning Outcomes

Upon completion of this AAS degree, students will demonstrate:

- Demonstrate hazard assessment and best safety practices.
- Demonstrate advanced technical skills that meet published industry standards in the welding and nondestructive examination fields.
- Demonstrate advanced technical knowledge of the interrelationship between metallurgy, welding and inspection processes.
- Demonstrate advanced forms of effective technical, oral, and written communication.
- Demonstrate application of advanced mathematical formulas and computations as applied in the welding, inspection and nondestructive examination fields.

University Honors College

www.uaa.alaska.edu/honorscollege (<http://www.uaa.alaska.edu/honorscollege>)

The mission of the University Honors College is to be a catalyst for scholarly engagement in undergraduate education. The College advances, coordinates and administers active learning and undergraduate research opportunities for students across the campus. Through its multidisciplinary academic and student support programs, the College serves as a locus for inquiry, discovery, creativity, leadership and engagement.

The College houses the Office of Undergraduate Research and Scholarship and the university honors program. University honors students may pursue any major or minor they wish at the baccalaureate level. Foundation University Honors College courses will satisfy General Education Requirements (GERs) in humanities and social science.

Students who complete the requirements of their disciplinary school or college and the program requirements of the University Honors College with a cumulative GPA of 3.0 or higher will be University Honors Graduates. Students who complete these requirements with a GPA of 3.50 or above will earn the designation of University Honors Scholar on their transcripts.

The University Honors College offers smaller classes with excellent faculty, guided individual and team-based research, personalized academic advising and mentoring, special leadership and internship opportunities, community involvement, and enhanced scholarship prospects. Honors courses will provide more active and engaged learning than is typical. Students will also participate together in a range of honors activities designed to enhance intellectual and personal opportunities. Intensive advising by College faculty and staff is an important element of the University Honors College, and honors students are required to meet regularly with advisors.

Academic Programs

The Honors Core Program requirements, taken by all honors students, include courses in humanities, social sciences and community service. All honors courses have an emphasis on critical thinking and analytical reading, taking on challenging activities through interdisciplinary

projects, and preparing students for participating in independent research in their disciplines.

In addition to the University Honors College, many departments at UAA offer departmental honors options. Students may complete both university and departmental honors requirements with dual designations upon graduation, and in some cases departmental honors courses may be substituted for one or more University Honors College requirements. In addition, students pursuing departmental honors and non-honors students may enroll in some University Honors College courses with permission of the University Honors College and on a space-available basis.

Admission to the University Honors College

1. Admission to the University Honors College is limited to baccalaureate degree-seeking students. Admission is separate from and in addition to general UAA admission requirements (p. 53).
2. Students must submit a completed University Honors College application, including supporting documents, to the University Honors College.
3. Admission is based on an overall evaluation of the student's probability of success in the college, and not on any single criterion or formula. In general, students applying to the University Honors College from high school or transferring into the program with previous college-level work must have at least a 3.00 GPA, and show strong evidence of ability to reach and maintain a 3.50 GPA level at UAA within a reasonable time. However, the initial GPA entrance requirement should be interpreted as a general guideline, and not as an absolute criterion; all students who believe that they can succeed and benefit in an honors program are encouraged to apply. Applicants may be asked for additional information or invited for an interview.

University Honors Scholar

Graduation Requirements

- Students must meet all General University Requirements (p. 85), General Education Requirements (GERs) (p. 86), school/college requirements and major requirements as printed in the UAA Catalog.
- Students must earn a cumulative GPA of 3.50 or higher, as defined under Graduation with Honors (p. 38).
- Students must complete the following courses with a grade of C or higher:

Code	Title	Credits
Honors Foundation Courses		
HNRS A192	Honors Seminar: Enduring Books *	3
HNRS A292	Honors Seminar in Social Science *	3
HNRS A310	Community Service: Theory and Practice	3

Honors Senior Project / Thesis Requirements

HNRS A392	Honors Thesis Seminar	1
Select one of the following:		6
A course proposed by the student and approved by the Honors College dean (3 credits minimum; may be an existing course or independent study) plus senior thesis or project (3 credits minimum; either departmental thesis/project, or HNRS A499)		
An upper division course listed in the catalog as a specific departmental honors requirement (3 credits minimum) and senior thesis or project (3 credits minimum; either departmental thesis/project, or HNRS A499)		
Six-credit thesis/project (either departmental thesis/project, and/or HNRS A499).		
Total Credits		16

* *Indicates courses that satisfy GERs*

A total of 16 credits is required.

As part of the advising/mentoring process, honors students' progress will be evaluated every semester. Students whose performance indicates potential difficulties in meeting the University Honors Scholar graduation requirements will be counseled on how to correct these difficulties, but if performance improvements do not result, the student may be removed from the college.

Natural and Complex Systems (NCS) Program

This pathway is not being offered at this time. For further information please contact the University Honors College.

Forty-Ninth State Fellows Program

This pathway is not being offered at this time. For further information please contact the University Honors College.

Interdisciplinary Baccalaureates

Upon completing at least 15 UAA credits, a student may develop an interdisciplinary Bachelor of Arts (BA) or Bachelor of Science (BS) program. The proposed program must differ significantly from established degree programs and must not be a substitute for a regular degree program. Interdisciplinary degree programs are not transferable to other University of Alaska campuses.

To receive a baccalaureate degree in interdisciplinary studies from UAA, the student must meet General University Requirements (p. 85), General Education Requirements (GERs) (p. 86), and school/college requirements as applicable. Major program requirements are established in the interdisciplinary program plan developed by the student in consultation with an advisory committee.

An interdisciplinary baccalaureate program proceeds as follows:

1. The student develops a proposal specifying the degree (BA or BS), title and program content, including recommendations for courses to meet GERs and school/college requirements as applicable.
2. The student obtains an advisory committee of at least three faculty members from the appropriate academic disciplines. If the interdisciplinary degree program involves more than one school or college, the committee must include a faculty member from each.
3. The student obtains the assistance of one faculty member to chair the advisory committee and serve as the interdisciplinary degree program director.
4. The student presents the proposal for committee review and approval. If the committee supports the proposal, it is forwarded to the appropriate academic dean(s) or director(s).
5. The dean(s) or director(s) review(s) the proposal, committee membership and recommendation for degree program director. If the dean(s) or director(s) approves(s) the interdisciplinary degree program and committee structure, the degree program plan is forwarded to the Office of the Registrar.
6. If changes are necessary in the degree program plan, they must have written approval of the advisory committee and appropriate dean(s) or director(s).
7. The student works with the advisory committee and the Office of the Registrar to ensure that all degree requirements are met.

Graduate Programs

(907) 786-1096

www.uaa.alaska.edu/graduateschool

Graduate education is an integral part of the University of Alaska Anchorage and is coordinated through the Graduate School. The dean of the Graduate School has responsibility for leadership and oversight of graduate programs.

The university offers graduate certificates, master's degrees and doctoral degrees. Students may also pursue graduate studies at UAA that apply toward doctoral degrees offered by other institutions. Some or all coursework and research may be completed at UAA while the doctoral degree is granted by another university.

Students who have completed UAA graduate programs possess the knowledge and skills necessary to succeed in furthering their education and to excel in their chosen professions. Whether the degree is required for advancement, personal and professional growth, or for other goals, students may expect the challenges and rewards of high quality graduate education.

Upon successful completion of their graduate programs, students will have demonstrated mastery of their disciplines and will have participated in independent scholarship. Appropriate exit requirements allow students to express the knowledge they have acquired in formats designed for their respective programs. For expected student outcomes in graduate programs, please see individual program listings.

To ensure the most beneficial educational experience, students' academic preparation and likelihood of success in their programs are carefully assessed and validated. Admission requirements provide an opportunity for students to document their credentials and demonstrate readiness for graduate studies. If an entrance examination is required, the nature of that examination is determined by the appropriate discipline. As they progress in their studies, students can expect discipline-specific advising from mentors in their programs.

Graduate students are subject to relevant policies contained in the complete UAA Catalog, as well as individual program requirements listed in this catalog and in graduate student handbooks developed by those graduate programs.

Campus Key

AI Program offered through Anchorage

College Key

CAS	College of Arts and Sciences
CBPP	College of Business and Public Policy
COEng	College of Engineering
COH	College of Health
CTC	Community & Technical College

Master's Degrees

Master of Applied Environmental Science and Technology

Program	Campus	College
Master of Applied Environmental Science and Technology (suspended) (p. 392)	AI	COEng

Master of Arts

Program	Campus	College
Anthropology (suspended) (p. 355)	AI	CAS
English (p. 361)	AI	CAS
Interdisciplinary Studies (p. 423)	AI	Graduate School

Master of Arts in Teaching

Program	Campus	College
Master of Arts in Teaching (p. 383)	AI	CAS

Master of Business Administration

Program	Campus	College
General Management (p. 374)	AI	CBPP

Master of Civil Engineering

Program	Campus	College
Master of Civil Engineering (suspended) (p. 393)	AI	COEng

Master of Education

Program	Campus	College
Counselor Education (suspended) (p. 379)	AI	CAS
Early Childhood Special Education (p. 379)	AI	CAS
Educational Leadership (p. 381)	AI	CAS
Special Education (p. 386)	AI	CAS
Teaching and Learning (p. 389)	AI	CAS

Master of Fine Arts

Program	Campus	College
Creative Writing and Literary Arts (p. 360)	AI	CAS

Master of Public Administration

Program	Campus	College
Master of Public Administration (p. 371)	AI	CBPP

Master of Public Health

Program	Campus	College
Public Health Practice (p. 404)	AI	COH

Master of Science

Program	Campus	College
Applied Environmental Science and Technology (suspended) (p. 392)	AI	COEng
Applied Geological Sciences (p. 363)	AI	CAS
Arctic Engineering (suspended) (p. 392)	AI	COEng
Biological Sciences (MS) (p. 358)	AI	CAS
Career and Technical Education (suspended) (p. 421)	AI	CTC
Civil Engineering (p. 393)	AI	COEng
Clinical Psychology (p. 366)	AI	CAS
Dietetics and Nutrition (p. 401)	AI	COH
Engineering Management (suspended) (p. 395)	AI	COEng
Global Supply Chain Management (p. 373)	AI	CBPP
Interdisciplinary Studies (p. 423)	AI	Graduate School
Mechanical Engineering (p. 395)	AI	COEng
Nursing Science (MS) (p. 408)	AI	COH
Project Management (p. 398)	AI	COEng
Science Management (suspended) (p. 395)	AI	COEng

Master of Social Work

Program	Campus	College
Master of Social Work (p. 418)	AI	COH

Dual Degree, Master of Public Health/Master of Social Work

Program	Campus	College
Master of Public Health/Master of Social Work (p. 406)	AI	COH

Graduate Certificates

Program	Campus	College
Children's Mental Health* (p. 367)	AI	CAS
Counselor Education (suspended)* (p. 379)	AI	CAS
Dietetic Internship* (p. 400)	AI	COH

Educational Leadership: Principal* (p. 382)	AI	CAS
Educational Leadership: Superintendent (suspended)* (p. 383)	AI	CAS
Environmental Regulation and Permitting (suspended)* (p. 392)	AI	COEng
Family Nurse Practitioner* (p. 411)	AI	COH
Language Education* (p. 390)	AI	CAS
Nursing Education* (p. 413)	AI	COH
Psychiatric and Mental Health Nurse Practitioner* (p. 414)	AI	COH
Special Education* (p. 387)	AI	CAS

Doctoral Programs

Program	Campus	College
Biological Sciences (p. 358)	Cooperative program with UAF	CAS
Clinical-Community Psychology (p. 368)	AI and jointly offered with UAF	CAS
Nursing Science (p. 416)	AI	COH
Occupational Therapy (p. 421)	Collaborative with Creighton University	COH
Pharmacy (p. 421)	Collaborative with Idaho State University (ISU)	COH
WWAMI School of Medical Education (p. 422)	Collaborative with the University of Washington	COH

* These programs have been defined as gainful employment programs. For more information regarding program costs and graduation and job placement rates, please visit our gainful employment website at www.uaa.alaska.edu/students/financial-aid/gainful-employment-disclosures.cshtml (<http://catalog.uaa.alaska.edu/graduateprograms/%20https://www.uaa.alaska.edu/students/financial-aid/gainful-employment-disclosures.cshtml>).

Graduate Degrees

General University Requirements

To complete a graduate degree, a student must complete the General University Requirements (GURs) for graduate degrees, school or college requirements, and program requirements. GURs for all graduate degrees are as follows:

1. A student must be admitted to the degree program and establish an approved graduate studies plan (GSP).
2. No more than 9 credits may be completed in the student's graduate program before program admission, unless a student wishes to apply credits from a previous graduate certificate in the same or closely related subject area.
3. The student must complete at least 30 approved semester credits beyond the baccalaureate degree for a master's degree, and must complete at least three years of post-baccalaureate study for a doctoral degree. For a master's degree, individual programs may place limits on the number of credits derived from thesis, individual research and/or independent study courses. No more than 45 credits may be required by any master's degree program, unless specifically approved by the University of Alaska Board of Regents. The actual number of credits required for each graduate degree program, including prerequisites for required courses, are specified in the current catalog. While no minimum or maximum credits are specified for doctoral programs, a student is expected to be affiliated with the university for at least two years. On approval by the dean of the Graduate School and college dean, an official GSP may stipulate other course credit requirements, including leveling courses.
4. Up to 9 semester credits not used toward any other degree (graduate or 400 level) may be transferred to UAA from an accredited institution and counted toward a graduate degree. In the case of a second master's degree, up to 9 credits may be transferred from a previous master's degree. In the case of a doctoral degree, up to 21 credits may be transferred from previous graduate study. Acceptance of transfer credit toward program requirements is approved by individual programs, college deans and the Graduate School.
5. Only 400- and 600-level courses approved by the graduate student's advisor, graduate studies committee and dean or designee may be counted toward graduate program requirements. Courses at the 500 level are for professional development and are not applicable toward any degree.
6. A cumulative GPA of at least 3.00 must be earned in courses identified in the official GSP.
7. In 600-level courses, a grade of C is minimally acceptable, provided the student maintains a cumulative GPA of 3.00 (B) in all courses applicable to the graduate program. At least 21 credits must be taken at the graduate level (600) for any master's degree, including thesis credits. For performance comparison only, in 600-level courses a grade of P (pass) is equivalent to a B or higher, but does not enter into the GPA calculation.
8. Courses taken as credit by examination, or graded credit/no credit (CR/NC) do not count toward graduate program requirements. They may, however, be used to satisfy prerequisites or establish competency in a subject, allowing the advisor or committee to waive certain courses in an established program as long as the total credits in the program remain the same.
9. All credits counted toward the degree, including transfer credits, must be earned within the consecutive seven-year period for a master's degree or the consecutive 10-year period for a doctoral degree prior to graduation. If these requirements are not met, admission expires and the student must reapply for admission and meet the admission requirements in effect at that time (see Catalog Year in Graduate Degree Policies (p. 349)).
10. Students must be continuously registered throughout their graduate program (see Continuous Registration in Graduate Degree Policies (p. 349)).
11. Students must complete all requirements established by the program and must pass a written or oral comprehensive examination; an evaluation of independent scholarship, project or thesis defense; or similar evaluation as established by the program. For programs with a thesis option, selection of that option will be indicated on the GSP and on the annual progress report. The evaluation, examination or defense must be approved by all graduate committee members as passing the requirement. For programs with projects that result in a written record, those records will be maintained by the programs for one year and are subject to review by the Graduate School. After the completion of a written or oral comprehensive exam, a thesis or a project, the student's graduate committee chair must submit an exam or defense report. (See Examinations below.)
12. When an oral comprehensive examination, project or thesis defense, or evaluation of independent scholarship is required, the student may select an outside reviewer approved by the dean of the Graduate School and college dean to participate in the evaluation. An outside examiner is required for a doctoral defense. Typically, the outside examiner is a faculty member from another department in the university, or other qualified individual in the area in which the student is seeking a degree.
13. All theses and dissertations must have final approval by the dean of the Graduate School.

Examinations (Requirement Determined by Program)

Qualifying Examinations

Some graduate degree programs require the student to complete a written and/or qualifying examination before advancement to candidacy. This examination is an interim evaluation of academic progress; the student may pass unconditionally or conditionally. A conditional pass indicates specific weaknesses that the student must remedy before degree requirements are completed. The Annual Report of Graduate Student Progress and Advancement to Candidacy Form should indicate mechanisms for addressing these weaknesses.

Comprehensive Examinations

Some graduate programs require that students pass a comprehensive examination, given to determine whether a graduate student has integrated knowledge and understanding of the principles and concepts underlying major and related fields, in order to achieve advancement to candidacy. For master's degrees, the graduate student's advisory committee may choose to give a written and/or comprehensive examination prior to advancement to candidacy. For doctoral degrees, written comprehensive examinations are normally required, although the student's committee may additionally choose to give an oral examination. A Report on Comprehensive Exam must be submitted to the Graduate School indicating date of completion, and approved by

the graduate advisor and committee, program chair, college dean, and the Graduate School.

Defense of Project

Graduate students who are required to complete a project in fulfillment of degree requirements may be required to pass an oral defense of the project. Defense dates must be submitted to the Graduate School and publicly posted one week before the defense. The defense will consist of a presentation followed by questions on the research, analysis and written project presentation. All committee members must be present at the project defense. A Report on Project Defense must be submitted to the Graduate School indicating date of completion, and approved by the graduate advisor and committee, program chair, college dean, and the Graduate School.

Defense of Thesis

Graduate students who are required to complete a thesis in partial fulfillment of degree requirements must pass an oral defense of the thesis. Defense dates must be submitted to the Graduate School and publicly posted one week before the defense. The defense will consist of a presentation followed by questions on the research, analysis and written thesis presentation. The Graduate School will not accept a thesis for final submission until the student has successfully defended it. All committee members normally must be present for the defense of thesis, either physically present or through electronic media. A Report on Thesis/Dissertation Defense must be submitted to the Graduate School indicating date of completion, and approved by the graduate advisor and committee, program chair, college dean, and the Graduate School.

Examination Committee

In most cases, the student's graduate advisory committee prepares and gives the examinations under guidelines formulated by the program in which the degree is being taken.

Outside Examiner (for Doctoral Defense)

An outside examiner representing and appointed by the dean of the Graduate School is required at all doctoral defenses. The examiner must be from a different department than the student and the chair of the advisory committee. The outside examiner is present to determine that a stringent, unbiased examination is fairly administered and evaluated, but may also make substantive contributions to the evaluation process.

Advancement to Candidacy (Requirement Determined by Program)

Some master's programs and all doctoral programs require students to apply for advancement to candidacy. Advancement to candidacy status is a prerequisite to graduation and is determined by the program chair or designee. Candidacy is the point in a graduate study program at which the student has demonstrated an ability to master the subject matter and has progressed to the level at which a GSP can be approved. For doctoral program students, an Advancement to Candidacy Form serves as the final GSP.

To be approved for candidacy, a student must:

1. Be in good academic standing.
2. Demonstrate competence in the methods and techniques of the discipline, which may include passing a comprehensive examination.
3. Receive approval of the independent scholarship, thesis or research project proposal from the student's graduate committee.
4. Satisfy all prerequisites, remove all academic deficiencies and satisfy all terms of provisional admission.
5. Submit an approved final official GSP.

Thesis Review

Before final acceptance, all members of a student's graduate committee, department/program chair/director, college dean, and the Graduate School dean must approve a thesis as required by the student's graduate program. Changes or corrections to the thesis may be required at any of these levels. The graduate committee is primarily responsible for thesis evaluation, grammar, punctuation, and usage, but the department chair/director and college dean will also conduct reviews to monitor the quality of theses and check for any overlooked errors. The Graduate School checks that format and style conform to UAA standards. Ideally, these checks should be made before the defense of a thesis or dissertation. In addition, the Graduate School dean will review selected theses and will not give final approval until all required corrections are made. Thesis credits will be given a deferred grade (DF) until all requirements are met.

Project Review

Before final acceptance, all members of a student's project committee, department/program chair/director, and college dean must approve a project as required by the student's graduate program. Changes or corrections to the project may be required at any of these levels. The project committee is primarily responsible for project evaluation, grammar, punctuation, and usage, but the department chair/director and college dean will conduct reviews to monitor the quality of projects and check for any overlooked errors. Students should check with their programs for required formatting. Ideally, formatting checks should be made before the defense of the project. In addition, the college dean will review projects and will not give final approval until all required corrections are made. Project credits will be given a deferred grade (DF) until all requirements are met.

Graduate Student Research

Graduate students planning to conduct research that involves the use of human participant subjects and/or human participant data, vertebrate animals, hazardous chemicals, biohazards, and/or radioactive materials are required to complete the Research Compliance and Intellectual Property (RCIP) Form. Also, if graduate students are planning research that will lead to intellectual property with commercial potential, they should complete the RCIP Form. At the same time, all graduate students are expected to respect the copyright, license and intellectual property rights that may attach to files of any media type, including software, texts, databases, images, video, music and other audio files, especially when using university computing and/or networking resources. For further information, contact the UAA Research Compliance

Office or the associate vice provost for Research Administration and Commercialization.

Graduate Degree Policies

Academic Appeals

Students have the right to appeal academic actions. See Academic Dispute Resolution Procedure (p. 25).

Academic Standing

Good Standing

Graduate students are in good standing when they have a UAA cumulative GPA of 3.00 or higher and a semester GPA of 3.00 or higher for the most recently completed semester. For those programs with a pass/no pass grading option, a grade of P is considered equivalent to a grade of B (3.00) or higher in graduate courses. Individual departments may establish additional criteria for good standing. Students are presumed to be in good standing during their first semester at UAA. Graduate students in their second year of study and beyond must also have an Annual Report of Student Progress on file with the Graduate School to be considered in good standing. Students in good standing are academically eligible to re-enroll at UAA.

Academic Action

Admitted graduate certificate- and degree-seeking students who fail to earn a UAA semester and/or cumulative GPA of 3.00 will be subject to academic action. Academic action may result in probation, continuing probation or loss of graduate certificate- or degree-seeking status. Individual departments may establish additional criteria for departmental academic action. Failure to meet or maintain these criteria may result in departmental probation or removal from a major program.

Academic Probation

Academic probation is the status assigned to those students not in good academic standing, i.e., whose semester and cumulative GPA falls below 3.00. It also applies to students who fail to undertake continuous registration or fail to make progress toward a graduate degree as indicated by the Annual Report of Student Progress.

Continuing Probation

Continuing probation is the status assigned to those students who begin a semester on probation and during that semester earn a semester GPA of 3.00 or higher without raising their cumulative GPA to 3.00. This status may be continued until the student raises their cumulative GPA to 3.00 or loses their graduate certificate- or degree-seeking status.

Academic Disqualification

Academic disqualification is the status assigned to those students who begin a semester on probation or continuing probation and fail to earn a semester GPA of 3.00, fail to undertake continuous registration or fail to make progress toward a graduate certificate or degree. Those students' admission status will be changed to non-degree-seeking. Students who have lost graduate certificate- or degree-seeking status may continue to attend UAA as non-degree-seeking students. However, those students do not qualify for financial aid and international students will lose their immigration status. Students must apply for reinstatement

to UAA (see Reinstatement to Graduate Degree-Seeking Status on this page).

Additional Master's Degrees

Students who have received a master's or doctoral degree from a regionally accredited college or university may earn a UAA master's degree by completing a minimum of 30 credits, of which 21 must be resident credits not used for any other previous degree. The student must meet all the General University Requirements for Graduate Degrees (p. 346), school or college requirements, and program requirements. Students may apply up to 9 credits required for a particular master's degree program from a previously earned master's program. These courses should be listed as transfer courses on the student's graduate studies plan (GSP), even if taken at UAA. Transferred credit may not include research, project or thesis credit. All other UAA policies governing master's degrees are applicable to second master's degrees. If the appropriate credits and other requirements have been earned, two or more degrees may be awarded simultaneously.

Catalog Year for Graduate Degree Programs

Each student's year of acceptance is established when the student is formally admitted into a certificate or degree program. A student's year of acceptance is adjusted if the student formally postpones admission, executes a change of major or reapplies after formal admission expires (see below).

Students may elect to graduate under the requirements of any catalog in effect during the seven years after formal acceptance to a master's degree program or 10 years after formal acceptance to a doctoral degree program.

If the requirements for the master's degree are not met within seven years of formal acceptance into the program, or 10 years for a doctoral program, admission expires and the student must reapply for admission.

All credits counted toward a master's degree, including transfer credit, must be earned within the consecutive seven-year period prior to graduation. All credits counted toward a doctoral degree, including transfer credit, must be earned within the consecutive 10-year period prior to graduation.

Students must meet the enrollment requirements in effect for courses at the time they enroll in each course. These requirements would include all catalog pre- or co-requisites for the course, as well as other registration restrictions at the time the course is taken.

Change of Degree

Graduate students who wish to change degree programs must apply for admission to the new program through the Office of Admissions and pay the appropriate fee. This applies both to changes between colleges and to different degrees within the same school or college (such as a change from the MFA in Creative Writing to the MA in English). However, this policy does not apply to changes between certificate and degree programs within a given field or college (such as from a Graduate Certificate in Educational Leadership to an MED). Students will be expected to meet all admission and program requirements of the new major or emphasis area.

Change of Major or Emphasis Area

Students who wish to change majors or emphasis areas within the same degree and college should submit a Graduate Change of Major or Emphasis Area Form to the Graduate School for approval. Students will be expected to meet all admission and program requirements of their new major or emphasis area, and must submit a revised official GSP to the Graduate School through their advisor/committee within one semester.

Concurrent Degrees

Students may pursue concurrent degrees as long as they have formally applied and been accepted to each program through the Office of Admissions.

Students may be admitted to or complete graduate certificate requirements as they pursue a master's degree. Coursework used to obtain a graduate certificate, if accepted for inclusion in the GSP, may be used to satisfy requirements for a master's or doctoral degree.

Continuous Registration

Continuous registration is expected every semester as appropriate for the program, from admission through graduation, until all requirements for the degree are completed.

To make continuous progress in a graduate program, students have the following options:

- Register for at least 1 graduate-level credit applicable to their graduate degree, or
- Pay the continuous registration fee to remain active in the graduate program although not registered in any courses. Students are also expected to register or pay the continuous registration fee for the summer if they use university facilities or consult with faculty during the summer. The continuous registration deadline is the same as the deadline for registration for thesis, research and independent study courses, i.e., the end of the ninth week of fall and spring semesters or the end of the seventh week of the summer semester. Failure to undertake continuous registration may result in previously deferred (DF) grades taken for thesis research becoming permanent grades. Students not making continuous progress or not on an approved leave of absence (see Leave of Absence on this page) may be placed on academic probation (see Academic Standing on this page) or, in some cases, removed from graduate degree-seeking status.

Formal Acceptance to Graduate Degree Programs

Once all required admission documents have been received by the Office of Admissions, the student's admission packet is forwarded to the chair or designee of the specific program. The acceptance decision is made by the chair or designee, subject to review and approval by the Graduate School. The Graduate School then informs the Office of Admissions of the decision. The Office of Admissions sends a letter of acceptance directly to the applicant, accompanied by the official certificate of admission from the Graduate School. Acceptance does

not establish candidacy in a graduate program (see General University Requirements for Graduate Degrees (p. 346) for more information).

Full-Time/Part-Time Status for Graduate Degree Programs

A student who has been admitted to a UAA graduate program and is enrolled for 9 or more 600-level credits is classified as full-time. Any graduate-level course in which the student enrolls in any semester and is listed on the approved GSP and is counted toward their degree potentially contributes to full-time status. This includes coursework taken at other universities or abroad (see Transfer Credits on this page).

A graduate student enrolled at UAA for 5 to 8 credits is classified as half-time. Courses at the 400-level will count toward full-time or half-time status if they are listed on the approved GSP. For financial aid purposes, a graduate student enrolled at UAA for fewer than 5 credits is classified as part-time. Audited courses, continuing education units (CEUs) and continuous registration are not included in the computation of a student's full-time, half-time or part-time status.

Graduate Advisor

The chair or designee of the department offering the graduate program, with the approval of the Graduate School, appoints a graduate advisor for each student accepted to the program. The graduate advisor and the departmental chair will normally be from the same program unless prior approval has been made by the Graduate School. Assigned advisors must be certified annually in the Family Educational Rights and Privacy Act (FERPA), and must be registered with the Office of the Registrar. Students are expected to meet with advisors by the end of the first semester, or the equivalent of 9 credits of study, in order to produce an initial GSP.

Graduate Assistantships

Graduate assistantships give students financial aid as well as opportunities to acquire valuable experience. They fall under three categories: teaching assistantships, research assistantships and service assistantships. Teaching assistantships involve academic instruction or instructional support activities under the supervision of a faculty member. Yearly FERPA certification is required of all teaching assistants. Research assistantships involve research or research support activities under the supervision of a faculty member. Service assistantships involve service activities such as office duties, library services, residence hall duties, athletic services or other academic or professional assignments. A student may hold two graduate assistantships for which the terms of appointment overlap, only if each of the assistantships is half-time (no more than 10 hours) during the period of overlap. Teaching and service assistants should have FERPA training, and research assistants should have training in responsible conduct of research. Performance reviews may be required by individual programs for any graduate assistants.

Graduate assistantships are available through the programs offering graduate degrees. These programs may set policies governing required duties for these assistantships, and may require organizational meetings prior to the beginning of the semester. Fellowships or scholarships may also be granted by graduate programs; these may be governed by

specific program rules or policies, including tuition awards. Graduate student assistantship contracts offered by programs are subject to review by the Graduate School. Contract letters must be brought to the Graduate School before the deadline for payment of student tuition and fees.

To be awarded graduate assistantships, students must be in good academic standing, as reflected by an Annual Report of Student Progress on file with the Graduate School (if beyond their second semester of study). Incomplete (I) grades may affect the ability of students to receive tuition awards associated with graduate assistantships. A graduate student with a GPA less than 3.00 for one semester will be allowed to petition to continue as a graduate assistant for the next semester. A maximum one-semester exception will be allowed per student. The petition by the student must be approved by the student's graduate committee chair, department head, school or college dean, and the Graduate School.

Graduate assistants receive stipends for either a semester or for the academic year. Graduate assistants can be paid for a maximum of 20 hours per week while school is in session. Students with assistantships must be registered for at least 9 credits during the fall and spring semesters or as attendance is appropriate to their program (audited credits are not eligible). This requirement does not apply to graduate students undertaking fieldwork during the summer semester. Graduate students spending significant time in the field during the fall or spring semester on a research assistantship are only required to enroll in 6 credits. Graduate students in their final semester of study are only required to register for 6 credits for graduate assistantships. For UAA graduate students in collaborative/cooperative graduate programs with other units of the University of Alaska system, payment of tuition scholarships may be governed by specific memoranda of agreement. Tuition scholarships may be used for tuition only. All fees are the responsibility of the student unless the department or grant makes other arrangements with the UAA Business Office prior to registration. Graduate assistants receive a health insurance benefit paid on their behalf. Graduate students must come to the Graduate School each semester and show a copy of their contract letter to complete the health insurance enrollment process. Students who expect to have teaching, service or research assistantships during an upcoming academic year may have health insurance paid by the relevant department, school or college for the preceding summer period.

Teaching or service assistantships include a tuition scholarship from the university for no more than 9 credits during each semester if the workload is 15 to 20 hours per week. If the workload is 10 to 14 hours per week, no more than 5 credits will be included. No tuition will be included if the workload is less than 10 hours per week. Graduate programs should provide prospective teaching and/or service assistants with notification of positions no later than August 1 for fall positions or December 1 for spring positions. Students are under no obligation to respond to such offers prior to April 30, but any acceptance of a position after this time commits the student not to accept another offer without first obtaining a written release from the Graduate School.

Research assistantships include a tuition scholarship from UAA grants/contracts for no more than 10 credits during each semester if the workload is 15 to 20 hours per week. If the workload is 10 to 14 hours

per week, no more than 5 credits will be included. No tuition will be included if the workload is less than 10 hours per week.

Graduate Studies Committee

For graduate programs with a thesis, independent scholarship or research project, the advisor and the student select a graduate studies committee as part of the process to complete the requirements of the graduate degree. Depending on the graduate degree, the committee minimally consists of three or four UAA faculty members, including the committee chair, who shall normally be a full-time faculty member. Committee members must be FERPA certified annually. Committee members and chairs whose status has changed to emeritus faculty may continue to serve on the committee. One faculty committee member may be from a discipline outside the student's school or college or UAA. Committee members who are not UAA faculty but have appropriate professional credentials may be included with the approval of the graduate advisor, the college dean and the dean of the Graduate School. The committee members must agree to serve and the committee must be approved by the college dean and dean of the Graduate School by submitting the Appointment of Graduate Committee Form. For doctoral degrees, an additional outside examiner is required to attend and evaluate the dissertation defense. For thesis-option students, graduate committees should be selected by the end of the second semester, or the equivalent of 18 credits of study, and should be listed on the initial GSP. Graduate committees should plan to meet at least twice during the academic year.

Responsibilities of Graduate Advisor/Committee

The division of responsibility between the graduate advisor and/or graduate committee is determined at the program level. The graduate advisor and/or graduate committee will do the following:

1. Review and approve the graduate student's program, ensuring that it includes the General University Requirements for Graduate Degrees (p. 346); all courses required for the degree; research culminating in a thesis, independent scholarship or project, if required; a written or oral comprehensive examination; independent scholarship evaluation; thesis/project defense; any special program requirements; and arrangements to remove any deficiencies in the student's academic background.
2. Monitor the student's progress, including grades, continuous registration and timely submission of Annual Reports of Student Progress to the Graduate School.
3. Review and approve requests for temporary leaves of absence, which, if approved, will result in the student being placed on inactive status.
4. Review and approve any changes to the student's program of study.
5. Review and approve the thesis, independent scholarship or research project, including initial proposals, according to procedures established by the individual graduate program. The graduate advisor and/or committee are responsible for ensuring that thesis content, language and formatting follow the requirements in the UAA Thesis Formatting Handbook (see the Graduate School website (<http://www.uaa.alaska.edu/graduateschool>)) as well as the style manual appropriate to the particular discipline.

6. Administer and assess the qualifying examination, independent scholarship evaluation or thesis/project defense.

Graduate Studies Plan

The official graduate studies plan (GSP) formally establishes the specific program requirements which will, upon satisfactory completion, entitle the student to receive a graduate degree. The plan is based upon the catalog requirements for the graduate degree program to which the student has been accepted. All graduate courses and leveling courses taken must be listed on the GSP. An initial GSP, including information on the student's advisor and graduate committee, should be submitted by the end of the first semester of study. The plan becomes official once it is approved by the dean of the Graduate School or designee and is filed with the Office of the Registrar. Students are expected to complete all requirements listed on their official GSP, as well as all General University Requirements for Graduate Degrees (p. 346). Revised GSPs need to be submitted to the Graduate School through the graduate advisor/committee. A final GSP must be submitted at the time of application for graduation (for doctoral students, the Advancement to Candidacy Form serves as the final GSP). Courses listed on the final GSP reflect catalog requirements in effect during the seven years after formal acceptance to a master's program or 10 years after formal acceptance to a doctoral program (see Catalog Year on this page). All GSPs are submitted electronically through DegreeWorks, except for interdisciplinary studies programs.

Leveling Coursework

The advisory committee may require that students remedy certain deficiencies in their program of study. The committee will determine early in the program both how to remedy the deficiencies and the minimum level of performance required. Graded undergraduate courses taken to remedy a deficiency must receive a grade of B (3.00) or better. Leveling courses will be noted in the DegreeWorks but will not be listed on the final GSP.

Concentrations

Individual graduate programs may offer concentrations, options, tracks or emphases within their disciplines. Graduate students who have completed a minimum of 9 unique credits in such a concentration will have this noted on their official transcripts.

Leave of Absence

While graduate students are expected to make continuous progress toward completion of their graduate programs, there are instances where continuous registration is not possible. Students who need to temporarily suspend their studies must apply for a leave of absence through their advisor and committee chair. If the leave is approved, the student is placed on inactive status by the Graduate School. Inactive status does not negate the policy which requires that all credits counted toward a master's degree, including transfer credits, be earned within a consecutive seven-year period prior to graduation, and for all credits counted toward a doctoral degree, including transfer credits, be earned within a consecutive 10-year period prior to graduation. Official leaves of absence are granted by the Graduate School and are normally limited to personal reasons that require suspension of studies. Students on a leave of absence do not have access to the use of university facilities. Students who fail to make continuous progress (see Continuous

Registration on this page) or to obtain an approved leave of absence may be removed from graduate degree-seeking status.

Non-Degree-Seeking Students

Non-degree-seeking students who wish to register for graduate courses must have the department chair's or faculty member's approval. Registration as a non-degree-seeking student implies no commitment by the university to the student's later admission to a degree program. Up to 9 semester credits of graduate-level coursework may be completed in the student's graduate program before program matriculation. No more than 9 graduate-level credits may be taken in a student's graduate degree program as a non-degree-seeking student. Non-degree-seeking students do not qualify for federal or state financial aid benefits, nor do they qualify to receive a Form I-20 Certificate of Eligibility for Nonimmigrant (F-1) Student Status.

Reinstatement to Graduate Degree-Seeking Status

A graduate student who fails to register for at least one graduate or 400-level credit per semester as listed on their official Graduate Studies Plan (GSP) for two consecutive semesters; voluntarily withdraws from the program; or fails to obtain an approved Leave of Absence will have to apply for Reinstatement before resuming graduate studies. Students seeking re-enrollment in multiple degree programs must file a reinstatement application for each program. Eligibility for Reinstatement is only valid up to six semesters, inclusive of summer semesters, beyond the last semester of attendance. If beyond six semesters, the student must apply for graduate studies with a new Graduate School application to the program.

To be considered for reinstatement, a student must be in good standing (with a cumulative GPA of 3.0 or higher) during their last semester of attendance and pay the fee for reinstatement.

The decision to approve or deny reinstatement into the original degree program is made by the student's home department. Departments are not obliged to approve reinstatement of students. Decisions may be based on the applicant's academic status when last enrolled; activities while away from campus; the length of absence; the perceived potential for successful completion of the program; the ability of department to support the student both academically and financially; as well as any other factors or considerations regarded as relevant by the department or program.

International students should contact UAA International Student Services regarding information about F-1 and J-1 federal regulations. Students should allow approximately six weeks for processing before requesting reinstatement to their program.

Reinstatement does not negate the policy that requires that all credits counted toward a master's degree, including transfer credits, be earned within a consecutive seven year period prior to graduation, and that all credits counted toward a doctoral degree, including transfer credits, be earned within a consecutive 10 year period prior to graduation.

Removal from Graduate Degree-Seeking Status

A graduate student's academic status may be changed to non-degree-seeking if the requirements to remove provisional admission or

probation are not satisfied, or if minimum academic standards are not met.

Resident Credit

Resident credit at UAA is defined as credit earned in formal classroom instruction, distance-delivered courses, directed study, independent study or research through any unit of UAA. Credit from a regionally accredited domestic institution or equivalent institution for which there is an approved affiliation or exchange agreement is also considered resident credit.

If a program is delivered collaboratively with UAF or UAS, collaborative program credit from each participating institution is counted toward fulfillment of residency requirements.

Transfer Credits

Coursework used to obtain a graduate certificate or a master's degree may be used to satisfy requirements for a graduate degree at UAA if accepted as part of the official GSP.

Up to 9 semester credits not used toward an undergraduate degree may be transferred to UAA from an accredited institution and counted toward a graduate degree. Up to 9 graduate credits may also be transferred in the case of a second master's degree, although doctoral degree credits may not be used toward an additional master's degree unless that degree is in a distinctly different field. Up to 21 previously attained graduate credits may be transferred in the case of a doctoral degree. The Graduate School dean or designee may allow credit earned at other universities within the UA system, excluding thesis credit and credits used toward another degree, to satisfy UAA program requirements, as long as at least 9 credits applicable to the student's program are earned at UAA after acceptance into that program. Acceptance of transfer credit toward graduate program requirements must be approved by the individual program faculty, college dean and Graduate School.

Graduate Certificates

General University Requirements

General University Requirements (GURs) for all graduate certificates are as follows:

1. A student must be admitted to the certificate program and establish an approved graduate studies plan (GSP). Students must fulfill all GURs, college requirements and certificate program requirements.
2. No fewer than 12 nor more than 29 credits may be required for any graduate certificate.
3. The student must complete all requirements established by individual programs, as specified in the current UAA Catalog.
4. A cumulative GPA of at least 3.00 (B) must be earned in courses identified on the official GSP.
5. Only 400- and 600-level courses approved by the student's graduate certificate advisor/committee and the dean or designee, may be counted toward graduate certificate requirements.
6. In 400-level courses, a minimum grade of B is required for the course to count toward the certificate program requirements.

7. Courses at the 500 level are for professional development and are not applicable toward any certificate, even by petition.
8. In 600-level courses, a grade of C is minimally acceptable, provided the student maintains a cumulative GPA of 3.00 (B) in all courses applicable to the graduate certificate program. At least two thirds of the credits required for the certificate must be taken at the graduate level (600). For performance comparison only, in 600-level courses a grade of P (pass) is equivalent to a B or higher, but does not enter into the GPA calculation.
9. Up to one-third of the semester credits used to complete the requirements of a graduate certificate may be transferred to UAA from a regionally accredited institution. Acceptance of transfer credit toward program requirements is at the discretion of the individual program.
10. At least one third of the credits used to satisfy graduate certificate requirements must be UAA resident credit completed after acceptance into the program.
11. Courses taken by correspondence, credit by examination or graded credit/no credit (CR/NC) do not count toward graduate certificate requirements. They may, however, be used to satisfy prerequisites or to establish competency in a subject, thus allowing the advisor or committee to waive certain courses in an established program, as long as the total credits in the graduate certificate program remain the same.
12. All credits counted toward the graduate certificate, including transfer credits, must be earned within the consecutive seven-year period prior to graduation.
13. If the requirements for a graduate certificate are not met within seven years of formal acceptance into the program, admission expires and the student must reapply for admission and meet the admission requirements in effect at that time (see Catalog Year in Graduate Certificate Policies (p. 353)).

Graduate Certificate Policies

A graduate-level certificate program is a coherent sequence of related graduate courses. These programs are designed to provide graduate education past the baccalaureate level and/or to enhance the education of students who have already completed a master's degree. Students will complete a linked series of courses, which may include a capstone experience or project that focuses their intellectual experience. Upon completion of a certificate, students will have acquired an area of specialization or an interdisciplinary perspective. Success in graduate-level certificate programs prepares students to better accomplish the goals of their discipline.

Academic Appeals

Students have the right to appeal academic actions related to graduate certificates. See the Academic Dispute Resolution Procedure (p. 25) for more information.

Academic Standing

A graduate certificate-seeking student who maintains a 3.00 (B) cumulative GPA in courses on their official graduate studies plan (GSP) is considered in good standing.

Additional Graduate Certificates

Students who have received a graduate certificate or master's degree from UAA or another regionally accredited college or university may earn a UAA graduate certificate by completing at least one-third of the certificate credit requirements (e.g., 4 credits for a 12-credit certificate program or 9 credits for a 27-credit certificate program) in residence at UAA and after admission to the certificate program. Credits previously used for any undergraduate certificate or degree may not be used to satisfy graduate certificate program requirements. Multiple graduate certificates may be awarded only if they differ by at least one-third of their credit requirements.

Catalog Year for Graduate Certificate Programs

Each student's year of acceptance is established when the student is formally admitted into a certificate or degree program. A student's year of acceptance is adjusted if the student formally postpones admission, executes a change of major or reapplies after formal admission expires (see below).

Students may elect to graduate under the requirements of any catalog in effect during the seven years after formal acceptance to the certificate program.

If the requirements for the certificate are not met within seven years of formal acceptance into the program, admission expires and the student must reapply for admission.

All credits counted toward the certificate, including transfer credit, must be earned within the consecutive seven-year period prior to graduation.

Students must meet the enrollment requirements in effect for courses at the time they enroll in each course. These requirements would include all catalog pre- or co-requisites for the course, as well as other registration restrictions at the time the course is taken.

Change of Graduate Certificates

Graduate students who wish to change certificate programs within a college or program must complete a Change of Graduate Degree or Emphasis Area Form and pay the appropriate fee. This applies both to changes between schools or colleges and to different certificates within the same school or college. Students will be expected to meet all admission and program requirements of their new major or emphasis area.

Concurrent Graduate Certificates

Students may pursue concurrent graduate certificates as long as they have formally applied and been accepted to each program through the Office of Admissions.

Formal Acceptance to Graduate Certificate Programs

Once all required admission documents have been received by the Office of Admissions, the student's admission packet is forwarded to the chair or designee of the specific program. The acceptance decision is made by the chair or designee, subject to review by the Graduate School. The Graduate School then informs the Office of Admissions of the decision. The Office of Admissions sends a letter of acceptance

directly to the applicant, accompanied by an official Certificate of Admission from the Graduate School. Acceptance to a graduate certificate program does not guarantee later admission to other graduate certificates or degrees.

Full-Time/Part-Time Status for Graduate Certificate-Seeking Students

A student who has been admitted to a UAA graduate certificate program and is enrolled at UAA for 9 or more 600-level credits is classified as full-time. A graduate certificate student enrolled at UAA for 5-8 credits is classified as half-time. Courses at the 400 level will count toward full-time status only if they are applicable to the graduate certificate program, i.e., listed on the graduate studies plan (GSP). For financial aid purposes, a graduate certificate student enrolled at UAA for fewer than 5 credits is classified as part-time. Audited courses, continuing education units (CEUs) and professional development courses (500 level) are not included in the computation of the student's full-time, half-time or part-time status.

Graduate Certificate Advisor

The chair or designee of the department offering the graduate program, with the approval of the Graduate School, appoints a graduate advisor for each student accepted to the program. Assigned advisors must be certified annually in the Family Education Rights and Privacy Act (FERPA) and must be registered with the UAA Office of the Registrar.

Responsibilities of the Graduate Certificate Advisor/Committee

The division of responsibility between the advisor and/or committee is determined at the program level. Committee members must be annually certified in FERPA. The graduate certificate advisor and/or committee will do the following:

1. Review and approve the student's GSP, ensuring that it includes the General University Requirements for Graduate Certificates (p. 353); all courses required for the certificate; any special program requirements; and a capstone experience or project, if required.
2. Arrange to remove any deficiencies in the student's admission or academic background.
3. Monitor the student's progress and timely completion of all requirements.
4. Monitor the timely submission of the official GSP and other documents to the Graduate School.
5. Review and approve any changes to the official GSP. The Graduate School will forward the original and final documents to the Office of the Registrar.
6. Review and approve the capstone experience or project according to procedures established by the individual program.
7. Administer and assess a comprehensive examination, if required.

Graduate Certificate Transfer Credits

Up to one-third of the semester credits (e.g., 4 credits for a 12-credit certificate program or 9 credits for a 27-credit certificate program) or the equivalent earned at a regionally accredited institution and not previously used to obtain any undergraduate degree or certificate may

be transferred to UAA and accepted toward a graduate certificate. Acceptance of transfer credits toward program requirements is at the discretion of individual programs.

Non-Degree-Seeking Students

Non-degree-seeking students who wish to register for graduate courses must have the department chair's or faculty member's signature for each course taken. Registration as a non-degree-seeking student implies no commitment by the university to the student's later admission to a graduate certificate program. Up to one-third of the credits of graduate certificate coursework may be completed in the student's graduate certificate program before program admission. Non-degree-seeking students do not qualify for federal or state financial aid benefits, nor do they qualify to receive a Form I-20 Certificate of Eligibility for Non-immigrant (F-1) Student Status.

Reinstatement to Graduate Certificate-Seeking Status

Students who have been removed from graduate certificate-seeking status for failure to make satisfactory progress must re-apply for a graduate certificate program and pay the appropriate fee after one calendar year from the semester in which they were removed. When re-applying for a graduate certificate program, it is the student's responsibility to demonstrate ability to succeed in that program. Readmission may be conditional on maintaining minimum academic standards within the first semester of study.

Removal from Graduate Certificate-Seeking Status

A graduate certificate student's academic status may be changed to non-certificate-seeking if the requirements to remove provisional admission are not satisfied or if minimum academic standards are not met.

A graduate certificate student whose cumulative GPA falls below 3.00 (B) in courses applicable to his/her graduate certificate program, or a graduate certificate student who, for reasons specified in writing, is not making satisfactory progress toward completing the program requirements, may be removed from graduate certificate-seeking status. Each school or college has developed procedures to deal with appeals arising from removal from graduate certificate-seeking status.

College of Arts and Sciences

www.uaa.alaska.edu/collegeofartsandsciences (<http://www.uaa.alaska.edu/collegeofartsandsciences>)

The College of Arts and Sciences offers graduate programs in Anthropology, Biological Sciences, Psychology, Creative Writing and Literary Arts, and English. Information about programs available in these disciplines can be found under the relevant department.

The School of Education, housed with the College of Arts and Sciences, offers master degree programs as well as graduate level certificates and endorsements. See the School of Education (p. 376) section of the catalog and the School of Education website (<https://www.uaa.alaska.edu/academics/school-of-education>) for more information.

Anthropology

Beatrice McDonald Hall (BMH), Room 231, (907) 786-6840

www.uaa.alaska.edu/anthropology (<http://www.uaa.alaska.edu/anthropology>)

Program of Study

Master of Arts

- MA in Anthropology (p. 355)

Faculty

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Paul White, Associate Professor, pjwhite2@alaska.edu

William Workman, Professor Emeritus

Master of Arts in Anthropology

Admission to the program is temporarily suspended for 2018-2019 academic year only. Admission will reopen for the 2019-2020 academic year and after.

The Master of Arts in Anthropology, with emphases in general or applied anthropology, is designed to provide a rigorous background in contemporary theory and practice in anthropology, particularly through the use of proseminars, internships and independent research. The MA requires a research-based thesis. The applied anthropology emphasis offers specialized tracks designed to train students in applied aspects of anthropology that may be employment related. The applied cultural anthropology track identifies and assists in resolving current social issues in their cultural dimensions. The applied biological anthropology track encompasses forensic anthropology, medical anthropology and other practical applications of physical anthropology. The cultural resource management track involves the inventory, assessment and conservation of archaeological and historical sites and remains, and places of traditional cultural importance, as a part of a larger management framework.

Admission Requirements

The deadline for application is February 15 for admission. Students seeking admission into the Anthropology MA program must:

- Satisfy the Admissions Requirements for Graduate Degrees (p. 50).
- Have completed a minimum of 18 credits of undergraduate coursework in anthropology with a GPA of 3.00. A completed baccalaureate degree in anthropology is preferred. (*Provisional admission is possible if this criterion is not met.*)
- Submit the following additional documentation:
 - a. Three letters of recommendation from professors or other professionals particularly qualified to attest to the applicant’s qualifications for graduate study.
 - b. A letter of intent, including a brief statement of the applicant’s research and career goals and reasons for pursuing graduate study in anthropology at UAA.
 - c. An example of a substantial paper or research proposal indicative of the applicant’s potential for graduate study.

Acceptance into the program is determined by the Anthropology Graduate Admissions Committee and is based on the prospective student’s overall credentials and the availability of appropriate faculty for student research interests.

Applicants without the minimum credits of undergraduate coursework in anthropology or who have other important deficiencies identified in their undergraduate training may be provisionally admitted to the MA program. Provisionally-admitted students are notified of identified deficiencies and required to complete leveling coursework at UAA, normally within a period of one year, before admission to regular status in the program is conferred. In some cases, deficiencies can be made up at another academic institution. Provisionally-admitted students cannot receive graduate teaching assistantships, research assistantships, or departmental travel/research grants.

Prospective graduate students are strongly advised to contact potential research/advisor faculty at an early stage of their admission process. An initial advisor is assigned to students based on interests and other academic criteria.

Academic Requirements

A full-time student in the MA program is expected to complete a minimum of 9 credits (or 6 in the final semester of coursework) applicable to the program per semester with a minimum cumulative GPA of 3.0. Part-time students must complete at least 3 credits per semester and maintain a cumulative GPA of 3.0. Upon completion of all coursework on the Graduate Studies Plan, students must enroll in continuing registration credits in fall and spring semesters. Failure to comply may result in the student being removed from the program. The same is true of students who fail to satisfy provisional-admission conditions. In addition, students must advance to candidacy within five years unless on an approved leave of absence. Such leaves of absence may not total more than four semesters.

Candidacy Requirements

See Advancement to Candidacy (p. 346) requirements. A student advances to candidacy by doing the following:

1. Select a graduate studies committee by the end of the second semester of graduate study.

2. Submit an official graduate studies plan (p. 349) (GSP) after no more than three semesters of full-time graduate study.
3. Complete at least 24 semester credits of non-thesis coursework applicable to the MA program.
4. Demonstrate research or statistical competence needed to complete the degree program, as approved by a student’s graduate studies committee. This can include statistics, computer skills, photogrammetry, SEM image analysis, or GIS analysis as appropriate. This can have been completed as an undergraduate.
5. In addition, a student may be required to demonstrate mastery of a foreign language, if deemed necessary by the graduate studies committee.
6. Pass ANTH A602, ANTH A605 and ANTH A611 proseminars and ANTH A620 with a minimum grade of B. If necessary, a proseminar may be repeated once, but failure to earn a B or higher the second time will result in removal from the program.
7. Receive from the graduate studies committee approval of a thesis prospectus.

Graduation Requirements

- Satisfy the General University Requirements for Graduate Degrees (p. 346).
- Complete the program requirements below.

Program Requirements

All graduate students must complete the Core Graduate Courses in Anthropology in addition to either the General Anthropology Emphasis or Applied Anthropology Emphasis requirements.

Core Graduate Courses in Anthropology

All students must complete the following:

Code	Title	Credits
ANTH A602	Proseminar in Cultural Anthropology ¹	3
ANTH A605	Proseminar in Biological Anthropology ¹	3
ANTH A611	Proseminar in Archaeology ¹	3
ANTH A620	Research Design ¹	3
ANTH A699	Thesis Research	1-6

Choose one of the following program emphases:

General Anthropology Emphasis

Code	Title	Credits
Complete coursework from electives. ^{2, 5}		12-17

Applied Anthropology Emphasis

Choose from the following three tracks:

Applied Cultural Anthropology Track

Code	Title	Credits
Complete the following two courses:		
ANTH A615	Advanced Applied Anthropology ³	3

ANTH A630	Advanced Research Methods in Cultural Anthropology ³	3

Complete 3 credits from the following: 3

ANTH A687	Advanced Field Methods in Cultural Anthropology ⁴	

ANTH A695	Anthropology Practicum ⁵	

Complete coursework from electives. ^{2, 5} 3-8

Applied Biological Anthropology Track

Code	Title	Credits

Complete the following course:

ANTH A652	Advanced Studies in Culture and Human Biodiversity ³	3

Complete 6 credits from the following: 6

ANTH A631	Advanced Field Methods in Archaeology and Bioanthropology ⁴	

ANTH A680	Advanced Analytical Techniques in Archaeology and Bioanthropology	

ANTH A690A	Advanced Studies in Health, Ritual and Science ³	

ANTH A695	Anthropology Practicum ⁵	

Complete coursework from electives. ^{2, 5} 3-8

Cultural Resource Management Track

Code	Title	Credits

Complete the following course:

ANTH A675	Cultural Resource Management	3

Complete 6 credits from the following: 6

ANTH A631	Advanced Field Methods in Archaeology and Bioanthropology ⁴	

ANTH A658	Advanced Applied Ethics in Anthropology ³	

ANTH A680	Advanced Analytical Techniques in Archaeology and Bioanthropology	

ANTH A695	Anthropology Practicum ⁵	

Complete coursework from electives. ^{2, 5} 3-8

¹ All proseminar courses and ANTH A620 must be taken in residence at UAA. These courses may not be taken by directed study or by correspondence. Students not admitted to the MA program must seek instructor permission to enroll in the proseminars or ANTH A620.

² Elective courses should be approved by the student's graduate advisor and committee and can include per the committee's discretion courses outside the field of anthropology. No more than 6 credits of 400-level coursework can be applied as elective courses.

³ If this course was taken as an undergraduate upper-division course with the same title/subtitle (i.e., a stacked 400-level course), another course may be substituted with the approval of the student's graduate advisory committee.

⁴ No more than 3 credits may be applied to this track.

⁵ No more than 6 credits combined of ANTH A695 Anthropology Practicum or ANTH A697 Independent Study may be applied to the degree, unless a student is taking more than one track in the applied anthropology emphasis, in which case 3 additional credits can be applied.

A total of 30 credits is required for the MA in Anthropology regardless of emphasis.

Additional requirements:

1. The student must advance to candidacy within five years based upon fulfillment of the candidacy requirements listed above.
2. The student must submit a written MA thesis to the graduate studies committee, conforming to UAA specifications.
3. The student must pass an oral defense of the thesis, open to the university community and the general public.
4. The student must submit an application for graduation (p. 38).

Program Student Learning Outcomes

Students graduating with a Master of Arts in Anthropology will be able to:

- Demonstrate comprehension at a graduate level in their knowledge of core concepts, research methods and findings in archeology, cultural anthropology and biological anthropology.
- Demonstrate comprehension of specialized knowledge in the track or subfield they select from program choices.
- Demonstrate the capacity to design anthropological research, conduct that research, analyze research results and present a thesis concerning that research acceptable by the faculty of the anthropology department.

Biological Sciences

ConocoPhillips Integrated Sciences Building (CPSB), Room 101, (907) 786-1298

www.uaa.alaska.edu/biological-sciences (<http://www.uaa.alaska.edu/biological-sciences/master-of-science>)

The Department of Biological Sciences is currently home to 20 tenure-track faculty members and a strong cohort of term, adjunct and affiliate faculty members. Our faculty have diverse research programs and strengths in ecology, evolutionary biology, cell and developmental biology, physiological ecology of plants and animals, biomechanics, microbiology, genetics, and molecular biology. The research of many departmental faculty members is directed at questions related to life in the north, including physiological adaptations to cold, dark and extreme environments, and the complex dynamics of ecosystem processes. Biomedical research is an important strength, and many of the faculty

participate in the IDEa Network of Biomedical Research Excellence (INBRE) program, funded by the National Institutes of Health.

Our productive graduate program includes more than 30 MS and PhD students. We are known for our commitment to provide students with maximum opportunities in faculty-directed field and lab research, ranging from molecular and cell-based studies to conservation, microbiology, ecology, animal physiology, biomechanics and toxicology research. Faculty and students participate in field research in the polar regions and beyond. Please contact us for more information or visit our faculty webpages (<http://www.uaa.alaska.edu/biological-sciences/faculty-and-staff/tenuretrackfaculty.cfm>).

Programs of Study

Master of Science

- MS in Biological Sciences (p. 358)

Doctoral Program

Students interested in pursuing a PhD in Biological Sciences at UAA may do so via collaborative programs with the University of Alaska Fairbanks (UAF). Students engaged in research with a UAA faculty member may apply to the following UAF PhD programs: biochemistry and molecular biology, biology and wildlife, or fisheries and ocean sciences. A UAA faculty mentor can advise the applicant on which program is most appropriate for the course of study. Each collaborative program has different admissions, degree and residency requirements. Please visit the UAF Graduate School's website (<http://www.uaf.edu/gradsch>) for additional information. We ask PhD applicants to send a complete copy of their application packet to our office for our files and highly recommend that applicants include the name of their UAA faculty mentor in their application cover letter. This will ensure a smoother application process. Please visit the UAF links below for detailed program information:

- Biochemistry and Molecular Biology (<https://www.uaf.edu/chem/graduate>)
- Biology and Wildlife (<http://www.bw.uaf.edu/graduates>)
- Fisheries and Ocean Sciences (https://www.sfos.uaf.edu/academics/?page_id=41)

Faculty

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Master of Science in Biological Sciences

The graduate program in biological sciences offers a research program of study leading to a Master of Science. The MS program requires a thesis that is the result of research performed under the supervision of a UAA faculty member.

We recommend that prospective students review the program guidelines and expectations, which are detailed in the D (<http://www.uaa.alaska.edu/biological-sciences/master-of-science/documentsanddates.cfm>) department's Graduate Handbook (https://www.uaa.alaska.edu/academics/college-of-arts-and-sciences/departments/biological-sciences/academic-programs/master-of-science/_documents/grad-handbook.pdf). General guidelines for prospective students can also be found on UAA's Graduate School webpage (<http://www.uaa.alaska.edu/graduateschool/prospective>).

Admission Requirements

Satisfy the Admission Requirements for Graduate Degrees (p. 50). Students seeking admission into the MS in Biological Sciences program should also meet the following requirements. Details on this process are available on the department's website (<http://www.uaa.alaska.edu/biological-sciences>).

1. Students must have a bachelor's degree in biology, chemistry or equivalent science to be determined by the Graduate Affairs Committee.
2. Applicants must take the general Graduate Record Examination (GRE). Applicants are encouraged to take the subject (biology, biochemistry or chemistry) exam, but this is not required.
3. Applicants must have at least a 3.00 GPA, or at least a 70th percentile in two out of the six possible GRE scores (verbal reasoning, quantitative reasoning, analytical writing, and the three subtests of the subject GRE). Successful applicants ordinarily have no grade lower than a C in undergraduate science courses.

Required Documents for Admission

1. Official scores from the GRE must be requested by the student and sent directly by the testing agency to the university. Scores must be received prior to admission to the program.
2. A brief (typically one page) statement of the applicant's research and career goals.
3. Three letters of recommendation from persons who are qualified to evaluate the applicant's ability to successfully perform graduate-

level coursework and research should be submitted directly to the department.

4. A letter of support from a UAA faculty member from the Department of Biological Sciences expressing willingness to accept the applicant into his/her research group and a statement of available funding or funding opportunities for research support for the student. Because students will not be admitted to the program without a faculty mentor from the department, prospective graduate students are strongly advised to contact faculty for research/advisor arrangements at an early stage of their admission process. Faculty research interests are available on the department website (<http://www.uaa.alaska.edu/biological-sciences/faculty-and-staff/tenuretrackfaculty.cfm>).

Applicants should also submit unofficial copies of items 1-4 to the department. Questions about this process should be directed to the departmental secretary at (907)-786-4770.

Mailing address:

*Department of Biological Sciences Graduate Program
3101 Science Circle, CPSB 101N
Anchorage, AK 99508*

Admission deadlines

All materials are due by March 1 for fall admission and by November 1 for spring admission. Acceptance is determined by the Graduate Affairs Committee and is based on the prospective student's overall credentials and the availability of appropriate faculty for student research interests. Files received after these deadlines will be considered on a case-by-case basis for admission the subsequent semester.

Graduation Requirements

- Satisfy the General University Requirements for Graduate Degrees (p. 346).
- Complete 30 credits of coursework approved in advance by the student's graduate study committee.
- Satisfactorily complete thesis research approved in advance by the student's graduate study committee and pass an oral thesis defense.
- Submit a written graduate thesis that has been approved by the graduate study committee, departmental director, and deans of the College of Arts and Sciences and the Graduate School.
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
600-level science electives (does not include BIOL A692, BIOL A696, BIOL A698 or BIOL A699 credits)		9
BIOL A601 or BIOL A604	Experimental Design and Statistics Experimental Design for Cell/Molecular Biologists	3
BIOL A605	Graduate Proseminar in Sciences	3
BIOL A606	Advanced Analysis and Interpretation *	3

BIOL A698	Directed Research **	1
BIOL A699	Thesis **	1

* *This requirement can be waived by the student's graduate study committee if the student has sufficient other experience or coursework in statistical analysis.*

** *In combined total, no more than 12 credits of BIOL A698 and BIOL A699 can count toward the 30 credits required for graduation; however more can be taken.*

In order to receive credit for coursework, students must receive a minimum grade of B in all 400-level courses, and a minimum grade of C in all 600-level courses, provided that the cumulative GPA does not drop below 3.00.

Additional requirements

1. Within the first semester of study, each student must select a graduate study committee consisting of a minimum of three members (no more than five is recommended). Two of the three members must be full-time, tenure-track faculty in the Department of Biological Sciences. The committee chair will be the student's primary research advisor if that person is a full-time UAA faculty member in the Department of Biological Sciences. If the primary research advisor is an affiliate faculty member, the chair will be shared with a full-time UAA faculty member from the Department of Biological Sciences, and both will be designated as co-chairs. To be a co-chair, a non-UAA faculty member must have official affiliate status within the department.
2. A student's graduate study committee must meet at least once each year to review a student's progress. The annual report on student progress (available online from the Graduate School) must be completed by the student and committee, signed by the graduate study committee, filed with the departmental secretary, and submitted to the UAA Graduate School no later than September 15 of each year. Failure to file annual progress reports will be taken as an indication of inadequate progress, and is grounds for probation and subsequent dismissal from the program.
3. Each student must submit an official GSP form by the end of the first semester of graduate work. The GSP formally establishes the specific program requirements that will, upon satisfactory completion, entitle the student to receive the graduate degree or certificate. This form must be approved by the student's graduate study committee and also be signed by the department director and the dean of the Graduate School.
4. All graduate students must remain in good standing throughout their program. At a minimum, students not in good standing will not be able to compete for teaching assistantships or be awarded tuition waivers from the department, college or Graduate School. Students not in good standing risk being placed on probation and/or removed from the program. In order to remain in good standing in the program, students must:
 - a. maintain a 3.00 GPA (cumulative) in all coursework listed on their GSP,
 - b. file a GSP by the end of their first semester in residence and
 - c. file satisfactory progress reports during each year in residence.

5. Within their first year in the program, each graduate student is required to submit a written thesis proposal that details the plan for the student's graduate work. This document is developed in consultation with the graduate advisor, and once prepared must be submitted and approved by the student's graduate study committee. A copy of the approved proposal shall be placed in the student's departmental file.
6. Students will conduct the research outlined in the thesis proposal and present their results as a graduate thesis following guidelines provided by the Graduate School. This written thesis must be approved by the graduate study committee, the director of the Biological Sciences Department, the dean of the College of Arts and Sciences, and the dean of the Graduate School in order to be considered complete. No student shall graduate without completing a written thesis.
7. Following submission of their thesis to their GSC, students must present a thesis defense seminar, which will be followed by a private meeting with their graduate study committee to finalize the defense. The student must successfully defend the thesis in order to graduate.

A total of 30 credits is required for the degree.

Program Student Learning Outcomes

Students graduating with a Master of Science in Biological Sciences:

- Have mastered the fundamental concepts of biology, including cell and molecular biology, genetics, physiology, evolution and ecology.
- Will have a working knowledge of the principles of scientific methodology, of the methods and technology of biological research, of quantitative analysis of scientific data, and will be capable of writing a publishable scientific paper.
- Will have a demonstrated mastery of at least one focus area within biology or biochemistry.
- Are prepared for a career in biological sciences or are prepared to pursue more advanced research opportunities (e.g., PhD or postdoctoral programs).

Creative Writing and Literary Arts

Administration/Humanities Building (ADM), Room 270, (907) 786-4394

www.uaa.alaska.edu/cwla (<http://www.uaa.alaska.edu/cwla>)

Program of Study

Master of Fine Arts

- MFA in Creative Writing and Literary Arts (p. 360)

Faculty

Anne Caston, Term Associate Professor, acaston@alaska.edu

Jo-Ann Mapson, Term Assistant Professor, jmapson@alaska.edu

Sherry Simpson, Professor, sasimpson@alaska.edu

Ronald Spatz, Professor, rmspatz@alaska.edu

David Stevenson, Professor and Program Coordinator, ddstevenson@alaska.edu

Master of Fine Arts in Creative Writing and Literary Arts

The Creative Writing and Literary Arts Program housed in the Department of English offers a Master of Fine Arts in Creative Writing and Literary Arts through a low-residency program. The MFA is a professional degree that prepares students for various careers, including those involving professional writing, teaching and editing. The MFA in Creative Writing and Literary Arts combines mentorships with a residency period of approximately 12 days held on campus each summer. The residency session includes all faculty and students in an intensive schedule of workshops, classes, presentations and readings. Students and mentors then conduct coursework at a distance during fall and spring semesters. Mentors include core faculty members and associate faculty who are established teachers and writers. Residency sessions also feature annual guests from other disciplines, including scientists, artists, musicians, cultural leaders and scholars. Students participate in three residency sessions as part of their workshop credits. During a fourth residency, they present a colloquium and give a public reading.

The program offers a studio model that balances the study and practice of craft, and the study of form and theory. Students are accepted into a particular genre: fiction, literary nonfiction or poetry and will concentrate their studies in that genre. During mentorships, students produce original works of literature as well as critical analyses of books chosen in collaboration with the mentor. The program offers — but is not limited to — special emphasis on writing about the relationships between people and place, landscape, nature, science, and the arts, regardless of where these relationships exist or how they are expressed. In their final year, students prepare and present a thesis that includes a book-length work of original creative writing, a thesis essay and an annotated bibliography. Through completion of the coursework and the thesis, students develop and demonstrate an understanding of the history, traditions, theory and contemporary issues in their genre and are able to situate their own work within that genre; articulate and demonstrate craft elements in their creative work; and develop and demonstrate the skills necessary for professional employment in literary fields such as writing, teaching and editing.

Admission Requirements

Satisfy the Admission Requirements for Graduate Degrees (p. 50).

In addition, at the time of application, students must submit the following to the Creative Writing and Literary Arts Program through UAOnline.

- Personal essay (see the department website (<http://www.uaa.alaska.edu/cwla>) for topic and detailed instructions).
- List of references, including email addresses; no need to send reference letter.
- Creative work: your best work
Fiction — One story (15 pages or less) or a chapter of a novel accompanied by a brief synopsis

Poetry — Ten pages of poetry, no more than one poem to a page
Literary nonfiction — Fifteen pages or less of an essay, memoir or other creative work of nonfiction.

Please see the CWLA website for the most current and detailed application instructions.

All materials must be received by January 15 for earliest consideration for admission into the program. Summer admission only.

Admission will depend upon the evaluation of the entire application packet, with emphasis placed on the creative work.

Graduation Requirements

- Satisfy the General University Requirements for Graduate Degrees (p. 346).
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
Complete 15 credits in the student's chosen genre from the following:		15
CWLA A652	Graduate Writer's Workshop: Poetry	
CWLA A662	Graduate Writer's Workshop: Fiction	
CWLA A672	Graduate Writer's Workshop: Literary Nonfiction	
Complete a minimum of 15 credits:		15
CWLA A690	Studies in Form and Theory *	
Complete 5 credits of:		5
CWLA A695	Literary Practicum	
Complete 10 additional course credits (CWLA A690 or CWLA A699) to produce a book-length creative work, annotated bibliography, and thesis essay.:		10
Total Credits		45

* CWLA A690 is an umbrella course and may be repeated with changes in subtitle.

Successful presentation of thesis in colloquium is also required.

A total of 45 credits is required for the degree.

Program Student Learning Outcomes

Students graduating with a Master of Fine Arts in Creative Writing and Literary Arts will be able to:

- Demonstrate a thorough understanding of historical context, traditions, and contemporary issues in form and theory by situating the content of their own work within their genre.
- Demonstrate their skills in craft by producing a substantial body of original creative work and by articulating the craft elements in their genre.

- Demonstrate skills necessary for professional employment in literary fields such as writing, and editing by planning, organizing, and presenting works or projects of literary and public value.

English

Administration/Humanities Building (ADM), Room 101, (907) 786-4355

www.uaa.alaska.edu/english (<http://www.uaa.alaska.edu/english>)

Program of Study

Master of Arts

- MA in English (p. 361)

Faculty

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Master of Arts in English

The Department of English offers a Master of Arts in English, emphasizing balanced coursework in literature, rhetoric, composition and linguistics. This degree prepares students for a variety of jobs in teaching, writing, editing and related fields, as well as for more specialized PhD programs. The degree culminates in a master's thesis or project that demonstrates the student's academic achievement and preparation for professional roles or advanced study.

Admission Requirements

Satisfy the Admissions Requirements for Graduate Degrees (p. 50).

Admission to the MA in English requires a baccalaureate degree from a regionally accredited institution in the United States (or foreign equivalent) as defined by the Council of Higher Education, with at least a 3.00 undergraduate GPA. Complete application packets are due by May 1 for fall enrollment.

At the time of application, students must submit the following documents to the Master of Arts program, Department of English:

- A 1000-1200 word application essay that addresses the student’s background in English, reasons for applying to the Master of Arts program, specific area(s) of interest, learning goals and professional objectives.
- A recent sample (from within the past five years) of the applicant’s academic or professional writing.
- Two letters of recommendation from faculty who know the applicant’s academic work (or professional writing, when appropriate).
- Admission to the program is based upon the evaluation of the entire application packet in conjunction with the applicant’s undergraduate GPA.

Students Without an Undergraduate Degree in English (or Related Discipline)

An applicant who does not have sufficient undergraduate experience in English may, at the discretion of the department, be required to take up to 9 credits of additional coursework at the undergraduate level. These preparatory courses do not count toward the MA and must be passed with a grade of B or better.

International Students

The department reserves the right to require TOEFL scores above the university requirement for graduate admission.

Assistantships and Work Study

Applicants to the graduate program who are also interested in an assistantship or work study should contact the Department of English for information.

Advising

The Graduate Coordinator will help students select classes for their first semester in the program. During the first year in the program, students should consult with faculty about possible areas of specialization and the design of a thesis or project that reflects the student's independent scholarship. By the end of the first year, the student should approach a faculty member to serve as advisor and chair of the student's graduate committee. The graduate advisor will mentor the student in development of the thesis or project and completion of other degree requirements.

Thesis or Project Requirements

The thesis or project is the culmination of the MA program. The decision whether a thesis or project is appropriate is made under the mentorship of the student's graduate committee. Students who complete a thesis write an extended, article-length text that demonstrates their ability to think creatively, research thoroughly, write effectively, and argue analytically at the graduate level. Independent scholarship may also be documented in an e-portfolio or other format approved by the student's committee. Additional requirements are the following:

1. The thesis or project should focus upon, and fall within, the disciplinary specialty of a tenured or tenure-track UAA English Department faculty member. (See the faculty profiles on the English

- Department webpage for descriptions of faculty members’ fields of expertise.)
2. Students must pass an oral defense of their thesis or project proposal before they are permitted to continue thesis or project work. The departmentally-scheduled proposal defense will occur by midterm of the semester immediately prior to the semester in which students intend to complete their thesis or project.
 3. Students must pass an oral defense of the thesis or project. The completed thesis or project should be submitted to the student's graduate committee at least three weeks prior to the defense. See the English Department for specific dates and deadlines. If the thesis or project is not submitted with adequate lead time and revisions are required, it is unlikely that the work can be completed in time to meet graduation deadlines. See the UAA Graduate School website for thesis deadlines.
 4. The thesis or project demonstrating independent scholarship requires multiple levels of approval. After a successful oral defense of the thesis or project, the work may require revision according to the recommendations of the student's committee. In addition, it must be approved by the Chair of the Department of English, the Dean of the College of Arts and Sciences, and the Dean of the Graduate School. Revisions may be required at each stage. Appropriate formatting is determined by the Graduate School.

Please see the Humanities support staff for a detailed description of the procedures to follow after the thesis or project defense. The degree can be posted, and a student can officially graduate, only after meeting all additional paperwork and administrative requirements as determined by the Graduate School. The Office of the Registrar completes the final degree check to ensure that all degree requirements have been met, including the resolution of any incomplete (I) or deferred (DF) grades.

Academic Requirements

Students enrolled in the program must:

- Achieve at least a 3.00 (B) in each of the program’s core courses.
- Receive no more than one 2.00 (C) grade in all courses.
- Demonstrate continuous progress toward completion of the degree.

Noncompliance with academic progress expectations will result in probation and possible dismissal from the program. See academic standing (p. 349) for more information.

Graduation Requirements

- General University Requirements for Graduate Degrees (p. 346).
- Complete the program requirements below.
- Thesis or project.
- Successful thesis or project defense.

Program Requirements

Code	Title	Credits
Core Courses		
ENGL A601	Introduction to Graduate Studies in English	3
ENGL A614	Advanced Research Writing	3

ENGL A635	Advanced Critical Theory	3
ENGL A637	Advanced Studies in Style and Stylistics	3
ENGL A676	Studies in Texts and Cultures	3
ENGL A698	Individual Research	6
or ENGL A699	Thesis	
Elective Courses		9
With the approval of the student's graduate committee chair, electives may include:		
All 600-level ENGL courses, including core courses with change of subtitle. With an appropriate subtitle, ENGL A690 may be substituted for a core course.		
Up to 9 credits of approved 400-level ENGL courses		
Up to 6 credits of approved coursework outside the department		
Total Credits		30

A minimum of 30 credits is required for the degree.

Program Student Learning Outcomes

Students graduating with a Master of Arts in English will be able to:

- Address precisely articulated critical questions.
- Demonstrate deep familiarity with print and electronic scholarship.
- Apply detailed evidence to support claims.
- Utilize field-appropriate theories and methodologies effectively.
- Write analytically according to disciplinary conventions.
- Document fully according to disciplinary stylesheets.

Geological Sciences

www.uaa.alaska.edu/academics/college-of-arts-and-sciences/departments/geology/ (<https://www.uaa.alaska.edu/academics/college-of-arts-and-sciences/departments/geology/>)

Programs of Study

Master of Science

- MS in Applied Geological Sciences (p. 363)

Faculty

Master of Science in Applied Geological Sciences

Applied Geological Sciences

ConocoPhillips Integrated Sciences Building (CPISB), Room 101, (907) 786-1298, uaa_geosciences@alaska.edu

www.uaa.alaska.edu/academics/college-of-arts-and-sciences/departments/geology/

Graduate study in applied geological sciences prepares students for work in the multitude of careers including environmental geology/

sciences, oil and gas industry, minerals and mining, and state and federal agencies that require a deep and broad foundation in the geological sciences. A Master of Science degree in Applied Geological Sciences (MSAGS) implies not only an enhanced level of understanding of the fundamentals of geological sciences, but also an applied skill set that allows students to apply advanced concepts of geological sciences to problem solving.

The Master of Science in Applied Geological Sciences has both a thesis and a non-thesis option. The thesis option includes a focus on skills related to the acquisition of new knowledge and is designed for students who wish to pursue higher entry level positions into jobs or to eventually pursue a Ph.D. degree. The non-thesis option is designed for students who wish to further emphasize applied geological sciences and prefer to substitute additional classroom education and a comprehensive written exam or a professional project and comprehensive oral exam for graduate research experience.

Program Objectives

The UAA applied geological sciences graduate program objectives are to provide graduates with:

1. Graduate-level technical knowledge within geological sciences.
2. An ability to conceive and conduct graduate-level geological sciences research and problem solving.
3. An ability to effectively communicate graduate-level geological sciences concepts and applications to a broad audience.

Student Learning Outcomes

In keeping with the above objectives, the expected student learning outcomes of the UAA MSAGS program include an ability to:

1. Use rigorous methods of scientific analysis.
2. Demonstrate mastery of graduate-level geological sciences theory.
3. Conduct advanced geological sciences research and/or demonstrate skill application.
4. Apply the scientific method to graduate-level problems in one or more focus areas of geological sciences.
5. Work effectively within the professional framework of geological sciences careers or be prepared for Ph.D. research programs.

Admission Requirements

Satisfy the Admission Requirements for Graduate Degrees and deadlines. Instructions are available on the Geological Sciences Department website (<https://www.uaa.alaska.edu/academics/college-of-arts-and-sciences/departments/geology/>). All students must hold a baccalaureate degree in geological sciences or closely related discipline and submit to the UAA Office of Admissions:

1. A completed UAA graduate application.
2. Official transcripts of all college-level work.
3. Graduate Record Examination (GRE) results, taken within two years prior to the application date.

4. Three letters of recommendation from professors or other professionals particularly qualified to attest to the applicant's qualifications for graduate-level research and study.
5. A resume or curriculum vitae.
6. A one-page personal statement discussing the applicant's credentials and readiness for graduate studies. This is an opportunity for the applicant to share relevant information, qualifications, and experience that would not be included with the UAA graduate application form or reflected on official transcripts. It is also the applicant's opportunity to describe his or her desire and commitment to pursue graduate study in geological sciences.

The application deadline for consideration of teaching assistantship funding in the Fall semester is March 1.

Advising

All graduate students enrolled in the MSAGS program must have an academic advisor identified prior to acceptance in the program. The academic advisor will assist the student through all aspects of the degree process, including:

1. Mentoring the student throughout the graduate degree duration.
2. Approving a graduate studies plan.
3. Overseeing the academic progress of the student.
4. Guiding the student through the development and completion of the graduate thesis project or professional project, where applicable.
5. Working with the graduate committee to evaluate the final thesis or professional project, or to develop and implement a comprehensive written exam, where applicable.

Academic Requirements

Graduation Requirements

- Satisfy the General University Requirements for Graduate Degrees.
- Complete the Program Requirements below.

Program Requirements, Thesis Option

Students must satisfy all University Requirements for Graduate Degrees and complete coursework and thesis work approved in advance by the student's academic advisor and graduate committee.

Students must complete a total of 30 credits of coursework, of which at least 24 credits must be at the 600 level. Up to 6 credits of 400- or 600-level coursework in related disciplines may count toward the degree if not used to fulfill any requirements of a baccalaureate degree. Coursework selected by the student must be approved by the student's graduate committee and must appear on the student's Graduate Studies Plan.

Code	Title	Credits
1. Complete 15 credits of Geological Sciences courses from the following:		15
GEOL A623	Advanced Igneous and Metamorphic Petrology	
GEOL A626	Advanced Mineral Resources	
GEOL A636	Advanced Petroleum Geology	

GEOL A637 Advanced Depositional Systems and Dynamic Stratigraphy

GEOL A638 Applied Sedimentary Petrology and Diagenesis

GEOL A640 Advanced Hydrogeology

GEOL A648 Advanced Structural Geology and Geomechanics

GEOL A654 Glacial and Quaternary Geology

GEOL A655 Permafrost

GEOL A656 Geoarchaeology

GEOL A658 Advanced Geology of Alaska

GEOL A663 Environmental Geochemistry

GEOL A665 Isotope Geochemistry

GEOL A676 Applied Geophysics

GEOL A678 Petroleum Geophysics and Petrophysics

GEOL A690 Graduate Topics in Geology

2. Complete the following professional practices course:

GEOL A689	Geology Graduate Professional Practices	3

3. Complete a minimum of 6 credits of elective courses, which may consist of 600-level courses in the department (including GEOL A698) or 400- or 600-level courses outside of the department that are relevant to the degree and which have been approved on the Graduate Studies Plan.	6

4. Complete 3 credits of geological sciences graduate thesis and at least 3 credits of graduate directed research:	6

GEOL A698 Directed Research

GEOL A699 Graduate Thesis

5. A written thesis proposal, submitted to the student's graduate committee by the beginning of the third semester, presenting evidence that the thesis requirements will be satisfied. The proposal will consist of an explicit problem statement, a literature review, and one or more sections describing the research and analytical methods that will be applied. The proposal is subject to approval by the student's graduate committee following an oral thesis proposal presentation scheduled no sooner than two weeks after submission of the written proposal.

6. Thesis document and oral thesis defense.

Total Credits	30

Thesis Requirements

The completed thesis must:

1. Describe how the work is associated with the current state of the science in the candidate's graduate field of study.
2. Contribute to the body of knowledge in the candidate's field of graduate study.

3. Be eligible to be published in either peer-reviewed technical conference proceedings or a peer-reviewed journal as judged by the candidate's graduate committee.
4. Demonstrate command of knowledge and skills associated with the candidate's program of graduate study and as stated in the Student Learning Outcomes.
5. Be defended by the student in an oral presentation to the candidate's graduate committee.

Program Requirements, Non-Thesis Option

Students must satisfy all University Requirements for Graduate Degrees, complete coursework selected from one of three focus areas approved in advance by the student's graduate advisor, and complete either a professional project or additional coursework. Completion of a professional project requires the student to have a graduate committee.

Students must complete a total of 30 credits of coursework, of which 24 credits must be at the 600 level. Up to 6 credits of 400- or 600-level coursework in related disciplines may count toward the degree if not used to fulfill any requirements of a baccalaureate degree. Coursework selected by the student must be approved by the student's graduate advisor and must appear on the student's Graduate Studies Plan.

Code	Title	Credits
1. Complete at least 15 credits from one of the geological sciences focus areas below:		15

I. Applied Environmental Geology

GEOL A637	Advanced Depositional Systems and Dynamic Stratigraphy
GEOL A640	Advanced Hydrogeology
GEOL A648	Advanced Structural Geology and Geomechanics
GEOL A654	Glacial and Quaternary Geology
GEOL A663	Environmental Geochemistry
GEOL A665	Isotope Geochemistry
GEOL A676	Applied Geophysics

II. Applied Petroleum Geoscience

GEOL A636	Advanced Petroleum Geology
GEOL A637	Advanced Depositional Systems and Dynamic Stratigraphy
GEOL A638	Applied Sedimentary Petrology and Diagenesis
GEOL A640	Advanced Hydrogeology
GEOL A648	Advanced Structural Geology and Geomechanics
GEOL A658	Advanced Geology of Alaska
GEOL A678	Petroleum Geophysics and Petrophysics

III. Applied Mineral Resources

GEOL A623	Advanced Igneous and Metamorphic Petrology
GEOL A626	Advanced Mineral Resources

GEOL A648	Advanced Structural Geology and Geomechanics	
GEOL A658	Advanced Geology of Alaska	
GEOL A663	Environmental Geochemistry	
GEOL A665	Isotope Geochemistry	
GEOL A676	Applied Geophysics	
2. Complete the following professional practices course:		
GEOL A689	Geology Graduate Professional Practices	3
3. Complete 12 credits of electives, which may include 600-level courses in the department and up to 6 credits of 400- or 600-level courses in a related supporting discipline as approved by the student's graduate advisor. 3 credits of GEOL A688 may be applied toward this requirement.		
4. Successfully complete a comprehensive written exam or a professional project report and comprehensive oral exam.		
Total Credits		30

Professional Project Requirements, if applicable

The project must solve an applied or practical problem in the geological sciences to the extent that original developments by the student are evident in the project report.

1. The project problem and solution must be explained in the context of the current state of the science by means of a thorough review of pertinent literature.
2. The project must include advanced technical components directly involving modern practice and applications of geological sciences.
3. The project must have sufficient scope to clearly demonstrate the student's advanced technical expertise in geological sciences.
4. The project report must demonstrate command of knowledge and skills directly associated with the student's graduate program of study and chosen focus area (I, II, or III above).
5. The project proposal, submitted prior to enrolling in GEOL A688, must present evidence that the above requirements will be satisfied and will generally consist of an explicit problem statement, a literature review, and methodology.
6. The final project will be in the form of a written report and oral presentation to the student's graduate committee.

In keeping with the program objectives, the expected student learning outcomes of the UAA MSAGS program include an ability to:

- Use rigorous methods of scientific analysis.
- Demonstrate mastery of graduate-level geological sciences theory.
- Conduct advanced geological sciences research and/or demonstrate skill application.
- Apply the scientific method to graduate-level problems in one or more focus areas of geological sciences.
- Work effectively within the professional framework of geological sciences careers or be prepared for Ph.D. research programs.

Psychology

Social Sciences Building (SSB), Room 352, (907) 786-1665
uaa.alaska.edu/psych

Programs of Study

Master of Science

- MS in Clinical Psychology (p. 366)y

Graduate Certificate

- Certificate in Children's Mental Health (p. 367)

Doctor of Philosophy

- PhD in Clinical-Community Psychology (p. 368)

Faculty

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Master of Science in Clinical Psychology

The Master of Science in Clinical Psychology is designed to be responsive to the needs of a variety of Alaska mental health service settings and to meet prerequisites for licensing requirements at the

master's level in psychology for the State of Alaska. The MS allows graduates to pursue either the licensed psychological associate (LPA) license or the licensed professional counselor (LPC) license.

The goal of the program is to provide students with a well-rounded education that includes an evidence-based background in the best practices applicable to community mental health settings. The curriculum addresses local behavioral health needs in a context that is culturally-sensitive and community-focused.

Admission Requirements

Satisfy the Admissions Requirements for Graduate Degrees (p. 50).

Forms and instructions are available on the Psychology Department website (<http://www.uaa.alaska.edu/psych/Programs/masters.cfm>).

1. Application deadline: March 1 for fall admission. This is the only opportunity for program admission each year.
2. Undergraduate training in general psychology; statistics or research; learning and cognition or strategies of behavior change; clinical psychology; and psychological testing. Examples of UAA courses that meet these requirements are PSY A111, PSY A260 or PSY A420; PSY A355 or PSY A400; PSY A425; PSY A473. Alternative courses and/or experiences will also be considered. Students without an undergraduate degree in psychology must have all prerequisites.
3. Submission of a letter of intent describing the applicant's interest and purpose in pursuing the MS in Clinical Psychology. The letter should address the reasons why the degree is being sought at this point in the applicant's professional development. See instructions on the website.
4. Submission of three professional letters of reference that address the applicant's suitability for the program.
5. Submission of Student Disclosure Form. See website.
6. Submission of a resume or vita that documents the applicant's vocational and professional experiences, academic achievements, research accomplishments, special projects, recognitions, and other information relevant to the applicant's qualifications for the program.
7. Submit copy of complete application packet to the Psychology Department office.

Departmental approval for admission to graduate study is contingent on the applicant's qualifications and interests and available space.

Graduation Requirements

- Satisfy the General University Requirements for Graduate Degrees (p. 346). Students must meet all applicable university requirements and achieve a grade of B or better in all coursework applied to the degree. Students are required to comply with the American Counseling Association (ACA) and the American Psychological Association (APA) ethical guidelines throughout program completion. Violation can result in immediate dismissal from the program.
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
PSY A604	Biological and Pharmacological Bases of Behavior	3
PSY A609	Applied Research Methods	3
PSY A611	Ethics and Professional Practice	3
PSY A612	Human Development in a Cultural Context	3
PSY A622	Multicultural Psychopathology	3
PSY A623	Intervention I	3
PSY A624	Group Therapy	3
PSY A626	Family Therapy	3
PSY A627	Community-Based Intervention Skills	3
PSY A633	Tests and Measurement in Multicultural Context	3
PSY A654	Cultural Issues in Psychotherapy	3
PSY A665	Psychotherapy Practicum	3
PSY A670	Psychotherapy Internship	6
PSY A681	Substance Abuse: Etiology, Treatment, and Assessment	1
PSY A682	Clinical Interventions for Substance Abuse	1
PSY A683	Substance Abuse Assessment and Treatment Planning	1
Elective		
Complete 3 elective credits to be approved by advisor. Course options include:		3
PSY A631	Cognitive Behavior Therapy	
PSY A638	Child Clinical Psychology	
PSY A690	Advanced Topics in Psychology	
PSY A699	Thesis	
Total Credits		48

A total of 48 credits is required for the degree.

Program Student Learning Outcomes

Students graduating with a Master of Science in Clinical Psychology will be able to:

- Apply a broad knowledge of contemporary psychology, with special emphasis in clinical psychology.
- Master and specialize in clinical psychology in either
 - psychological research or
 - a clinical issue related to community treatment.
- Demonstrate acceptable skills in research analysis (including writing and mastery of APA style).
- Demonstrate competence in basic clinical skills sufficient to practice under general supervision.

Graduate Certificate in Children's Mental Health

The Graduate Certificate in Children's Mental Health prepares graduate students and post graduates to practice children's mental health using principles and methods from multidisciplinary sources to assist in the mental health treatment of children and their families. This certificate will strengthen competencies for work in education, social work and psychology jobs that specialize in children's mental health. The program builds on the knowledge and skills acquired through current or previous master's level study in these or related fields. The 13-credit graduate certificate is designed to supplement each candidate's existing experience and academic preparation and the extent to which each candidate achieves the program outcomes. Therefore, specific required courses are not listed for some of the course requirements, since individual graduate studies plans may vary considerably based on the prior coursework of each candidate. The faculty advisors will use the program's academic preparation requirements derived from state and national children's mental health workforce competency guidelines to guide coursework selections included on the graduate studies plan. Students develop advanced knowledge and competencies for working with children's mental health issues as well as cross-discipline skills for working in Alaska's systems of care. Applicants may either be in a behavioral health graduate program or have graduated from an approved program.

Admission Requirements

Applicants for the Graduate Certificate in Children's Mental Health must:

- Satisfy the Admission Requirements for Graduate Certificates (p. 50).
- Complete the Children's Mental Health Graduate Certificate Application, which can be found on the program website (<http://www.uaa.alaska.edu/psych/Programs/childrens-mental-health-graduate-certificate.cfm>).
- Have graduated from or currently be students in an accredited or approved program of social work, psychology, counseling/special education, or a related field.
- Have completed a prerequisite or corequisite course in child development.
- Provide a written summary of their children's mental health related experiences and career goals.

Graduation Requirements

- Satisfy the General University Requirements for Graduate Certificates (p. 353).
- Complete the program requirements below.
- Complete the curriculum requirements for the graduate certificate with a cumulative GPA of 3.00 or better. All courses must be at or above a grade of B.

Program Requirements

Area Requirements

Applicants who have graduated from or are currently students in an accredited or approved program of social work, psychology, counseling/special education, or a related field are required to complete or show evidence of having successfully completed graduate coursework in the following areas:

Code	Title	Credits
	Family systems	3
	Assessment/intervention/ethics in children's mental health	3
	Specialty content coursework in children's behavioral health issues	3
Total Credits		9

Course Requirements

In addition, applicants are required to complete the following courses as part of the certificate program:

Code	Title	Credits
PSY/EDSE/SWK A677	Multidisciplinary Seminar in Children's Mental Health	1
PSY/EDSE/SWK A691	Children's Mental Health Systems of Care	3
Total Credits		4

A total of 13 credits is required for the certificate.

Program Student Learning Outcomes

The program is designed to expand specific skills and clinical experiences in children's mental health and allow students to expand their expertise through a multidisciplinary understanding of children's mental health practices in Alaska. Outcomes for the program are based on state and national competency guidelines for children's mental health. Students who complete this program will be able to:

- practice within the legal and ethical parameters of the profession.
- identify children and their families who are at risk and to assess and intervene properly.
- apply a variety of theories and methods of assessment and intervention in their practice.
- understand systems of care as they apply to children's mental health.
- assess, collaborate, intervene and document resources and services for children's mental health.

PhD in Clinical-Community Psychology

www.uaa.alaska.edu/phdpsych

The PhD in Clinical-Community Psychology is accredited by the American Psychological Association as a clinical psychology program.

The PhD in Clinical-Community Psychology with Rural, Indigenous Emphasis integrates clinical, community, and cultural psychology with a focus on rural, Indigenous issues and an applied emphasis on the integration of research and practice. The program advances academic excellence, promotes innovative and practical research, and provides solid graduate training in clinical-community psychology.

The program ensures that graduates have obtained the full range of clinical training mandated for doctoral-level clinical psychologists and will be adequately prepared for licensure as psychologists. The program meets doctoral education requirements for licensure as a psychologist in the State of Alaska. Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Admission Requirements

Satisfy the Admission Requirements for Graduate Degrees (p. 50).

Students apply to the Ph.D. in Clinical-Community Psychology program through the UAA Office of Admissions. All applicant materials are collected and evaluated by the admissions committee, which makes admissions recommendations to the dean of the UAA Graduate School. For more information about the application process, visit the program website (<http://psyphd.alaska.edu>).

1. Application deadline: received by January 15 for fall admission. This is the only opportunity for program admission each year.
2. Bachelor's degree (BS or BA or BED); major in psychology or related field preferred. All requirements for bachelor's degree must be completed by June 30 prior to matriculation.
3. Minimum 3.00 GPA in major and in all psychology courses.
4. Coursework in the areas of abnormal psychology, statistics, research methods and one of the following: personality, clinical psychology, social psychology or community psychology. All prerequisite coursework must be completed by June 30 prior to matriculation.
5. Letter of intent that (a) describes the applicant's interest and purpose in studying clinical-community psychology, and (b) explains the reasons why a Ph.D. in clinical-community psychology is sought at this point in the applicant's professional development.
6. Professional vita, including documentation regarding academic, research and professional experiences; special projects and activities; and recognitions or honors.
7. Three professional letters of reference (preferably curriculum or research advisors, major course instructors with whom the student had contact in more than one course, and/or supervisors).
8. Lifetime criminal background check must be submitted by students invited to a personal interview at least two weeks prior to the interview. Additional information on the Identity History Summary through the FBI is located on the program website (<https://www.uaa.alaska.edu/academics/college-of-arts-and-sciences/departments/psychology/academic-programs/graduate/phd/prospective-students/admission.cshtml>). In addition to completing

the identity history, applicants complete a disclosure statement as part of the Application for Admission.

Graduation Requirements

- Satisfy the General University Requirements for Graduate Degrees (p. 346).
- Complete the program and additional requirements below.

Program Requirements

Students must complete the required courses, dissertation, internship and electives. Students must accumulate a minimum 115 credits to graduate and must have completed all required coursework. Graduate course work completed at other universities cannot be used to waive required courses.

Cultural experience: During their time in the Ph.D. program, students must participate in a cultural experience as defined by program faculty. The actual experience will vary from year to year, but includes direct exposure to Alaska Native and other cultural worldviews, values and life experiences through contact with cultural elders and advisors in a non-classroom setting.

Code	Title	Credits
PSY A602	Native Ways of Knowing	3
PSY A604	Biological and Pharmacological Bases of Behavior	3
PSY A605	History and Systems	1
PSY A607	Cognition, Affect and Culture	3
PSY A611	Ethics and Professional Practice	3
PSY A612	Human Development in a Cultural Context	3
PSY A616	Program Evaluation and Community Consultation I	3
PSY A617	Program Evaluation and Community Consultation II	3
PSY A622	Multicultural Psychopathology	3
PSY A623	Intervention I	3
PSY A629	Intervention II	3
PSY A632	Community Psychology Across Cultures	3
PSY A633	Tests and Measurement in Multicultural Context	3
PSY A639	Research Methods	3
PSY A640	Substance Abuse: Etiology, Treatment and Assessment	3
PSY A652	Practicum Placement - Clinical I	6
PSY A653	Practicum Placement - Clinical II	6
PSY A657	Quantitative Analysis	3
PSY A658	Qualitative Analysis	3
PSY A672	Practicum Placement - Community I	3
PSY A679	Multicultural Psychological Assessment I	3

PSY A684	Clinical Supervision and Consultation	3
PSY A687	Multicultural Psychological Assessment II	3
PSY A686	Predoctoral Internship	18
PSY A699D	Dissertation	18
Electives		6
Total Credits		115

A total of 115 credits is required for the degree.

Additional Requirements

Integration Seminar

First-year and third-year students are required to attend a monthly 1-hour lecture series that introduces current trends in community, clinical and multicultural psychology.

Research Competency

Research competency is demonstrated through preparation of a research portfolio that will be evaluated by an ad hoc committee. Criteria for the research portfolio will be clearly defined and samples will be provided for students. Students must demonstrate research competency before advancing to candidacy and enrolling in dissertation credits.

Clinical Competency

Clinical competency is demonstrated through preparation of a clinical portfolio that will be evaluated by an ad hoc committee. Criteria for the clinical portfolio are clearly defined and samples will be provided for students. Students must demonstrate clinical competency before applying to advance to internship and must pass the clinical competency and community competency before starting PSY A686.

Community Competency

Community competency is demonstrated through preparation of a community portfolio that will be evaluated by an ad hoc committee. Criteria for the portfolio will be clearly defined and samples will be provided for students. Students must pass both the clinical competency and community competency before starting PSY A686.

Advancement to Candidacy

Before students are allowed to register for dissertation credits, they will be reviewed for performance by the committee, using existing university standards and forms for advancement to candidacy. Review will be based on faculty experience with the student to date, submitted paperwork and the student's progress through the program. Feedback from the review will be provided to the student by her or his advisor. To advance to candidacy, students must also have received at least a conditional pass on their comprehensive exam. The program defines the comprehensive exam as being met through passing the required competency portfolios. Passing the research portfolio qualifies the student for a conditional pass on the comprehensive exam, which is sufficient for advancement to candidacy. All portfolios must be passed for the comprehensive exam to be fully passed.

Doctoral Dissertation Proposal Defense

Before commencing data collection for a dissertation project, students must defend their proposal to their dissertation committee. The defense must be based on a written dissertation proposal to be distributed to the dissertation committee after approval by the dissertation chair. The defense will be an oral presentation to the committee by the student and will not be a public meeting. For data-collection based dissertations, the proposal must also be approved by the UAA institutional review board before data collection can commence.

Doctoral Dissertation

A doctoral dissertation must be carried out successfully and approved by a doctoral dissertation committee. The dissertation committee will consist of at least four members. Content areas can vary widely, but must be related to clinical, community, or multicultural issues and applicable in Alaska settings.

Advancement to Internship

Students must pass the clinical portfolio and at least conditionally pass their dissertation proposal defense before applying to advance to PSY A686. In addition to passing the clinical portfolio and conditionally passing the dissertation proposal defense, students must apply to the program director by September 30 (the fall semester prior to the year during which the student seeks to complete the internship) stating their intent to advance to internship. For most students this will mean that the application needs to be made in the fall of the fourth year in the program. The program director will notify the core faculty committee, which will review each student's coursework, ensure that adequate progress has been made toward all prior milestones (i.e., clinical competency, community competency, research competency, doctoral dissertation proposal defense and advancement to candidacy) before approving the student for internship and before writing a letter of support for the student. Students must fully pass the clinical portfolio, the community portfolio and the dissertation proposal defense before starting internship. Failure to pass the clinical portfolio, the community portfolio and the dissertation proposal defense will result in the student not being eligible to apply for or enroll in internship credits.

Internship

A full-time, 18-credit (one-year) internship is required. This internship should meet the criteria laid out by the American Psychological Association (APA); selection of an Association of Psychology Postdoctoral and Internship Centers (APPIC)-approved internship is encouraged. Placements in Alaska are preferred, but not required.

APA Ethical Guidelines

Strict compliance with APA Ethical Principles of Psychologists and Code of Conduct is required throughout participation in the degree program. Violations can result in immediate dismissal from the program and failure to graduate. Completion of an annual disclosure statement is also required. Affirmative answers may result in dismissal from the program and failure to graduate.

Program Student Learning Outcomes

Students graduating with a Ph.D. in Clinical-Community Psychology will be able to demonstrate:

- Culturally grounded knowledge and skills in scientific inquiry.
- Competency in using the research and evaluation skills to disseminate new knowledge and inform clinical and community practice.
- Culturally grounded knowledge and skills in rural clinical-community practice.
- Competence in developing and implementing culturally relevant prevention and intervention efforts and programs.
- Culturally grounded knowledge and skills relevant to social and healthcare solutions.
- Competency to facilitate policy and social change.

College of Business and Public Policy

www.business.uaa.alaska.edu

The College of Business and Public Policy (CBPP) offers three graduate degrees:

- Master of Business Administration, General Management (p. 374)
- Master of Science, Global Supply Chain Management (p. 373)
- Master of Public Administration, Public Administration (p. 371)

These degree programs prepare students to function as effective leaders and managers in for-profit and not-for-profit organizations. Because of the related nature of the three CBPP degrees, students interested in pursuing two degrees simultaneously or in pursuing a second graduate degree may be able to complete the second degree with a significantly reduced number of credit hours (see Additional Master's Degrees in Graduate Degree Policies (p. 349)).

Economics and Public Policy

Edward & Cathryn Rasmuson Hall (RH), Room 304, (907) 786-4171
www.uaa.alaska.edu/cbpp

The Master of Public Administration (MPA) program provides students with knowledge and skills needed for professional careers in public service. MPA students learn analytical techniques and add to their expertise in organizational and program management, policy analysis, and related areas. The program emphasizes public policy, management and administrative issues.

Program of Study

Master of Public Administration

- Master of Public Administration (p. 371)

Faculty

Steven Aufrecht, Professor Emeritus, afsea@alaska.edu
 (AFSEA@alaska.edu)

Willie Hensley, Visiting Distinguished Professor, whensle2@alaska.edu

Greg Protasel, Associate Professor, afgjp@alaska.edu
 (AFGJP@alaska.edu)

Sheila Selkregg, Term Assistant Professor, sheilas@alaska.edu
 Diwakar Vadapalli, Assistant Professor, dkvadapalli@alaska.edu

Master of Public Administration

Students specialize in one of the following emphasis areas: public management, public policy analysis, health administration or criminal justice. Dual emphasis areas can also be pursued.

The public management emphasis is designed for those working for, or planning to work for, executive agencies of local, state and federal governments; private nonprofit organizations; or government relations units of private corporations. It provides basic tools of public management, understanding of structure and processes of public organizations, and the history and context of the field of public administration.

The public policy analysis emphasis offers professional staff of executive and legislative departments of local, state and federal governments the capability to analyze the effects of a broad range of actual and hypothetical government policies. It emphasizes application of economic analysis and other quantitative and qualitative methods to Alaska and national policy issues.

The health administration emphasis prepares students as health administrators in local, state or federal agencies; non-profit organizations; and private companies in health-related fields. Students develop knowledge and skills necessary for effective public management in the health care area: planning, decision making, and managing people, money and programs.

The criminal justice emphasis provides a theoretical basis for management careers in criminal justice. Students develop knowledge and skills necessary for effective public management: planning, decision making, and managing people, money and programs. These skills are applicable to a wide spectrum of employment areas in law enforcement and the criminal justice system, and they are relevant for students seeking a terminal degree in justice administration.

Students can graduate with a dual emphasis by completing the nine credits required for each emphasis. A dual emphasis requires nine credits beyond those required for a single emphasis. Interested students should speak with an advisor.

Admission Requirements

Students enter the MPA program with bachelor's degrees from a variety of educational backgrounds. Accordingly, the program meets the needs of students with a wide mix of professional and educational backgrounds and interests.

To apply for admission, applicants must meet the UAA Admission Requirements for Graduate Degrees (p. 50) and must:

- Submit a 300-500 word statement on their career goals and how the MPA degree relates to them.
- Submit a professional resume or vita.
- Meet one of the following criteria:

- Have a combined undergraduate GPA plus GRE Analytic score totaling 7.0 or higher. The GRE test is not required for students having already earned a graduate degree from a regionally accredited institution in the United States or a foreign equivalent, provided they have an undergraduate GPA of 3.00.
- Have an undergraduate GPA of 3.00 and have taken an introductory course in government (or demonstrate knowledge by taking an approved UAA college-level achievement examination)
- Complete two PADM core courses with a grade of B or better and complete all PADM core course prerequisites (BA A273, ECON A201 and ECON A202 or ECON A602, and PS A101) or their equivalents.

Detailed admission standards are available on the department website (<http://www.uaa.alaska.edu/cbpp/academics/publicadministrationmpa.cfm>).

Contact the CBPP Graduate Office for full program information, including application forms and procedures.

Graduate Office
UAA College of Business and Public Policy
 3211 Providence Drive, Anchorage, AK 99508 U.S.A.
 Telephone: (907) 786-4171
 Fax: (907) 786-4115

Academic Requirements

To maintain satisfactory progress toward the degree, a student in the MPA program is expected to complete a minimum of 6 semester credits each calendar year, starting with the first term of enrollment. The 6 semester credits may consist of either undergraduate prerequisite courses or graduate program courses. Failure to comply with the 6 credit minimum each calendar year may result in a student being dropped from the program.

Graduation Requirements

- Satisfy the General University Requirements for Graduate Degrees (p. 346).
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
Core Courses		
ECON A625	Economics and Public Policy	3
PADM A601	Introduction to Public Administration	3
PADM A602	Seminar in Public Management and Leadership	3
PADM A604	Research Methods in Public Administration	3
PADM A606	Public Policy-making Process	3
PADM A608	Organizational Theory, Design and Development	3
or BA A634	Organizational Design and Development	

Electives

6 credits of advisor-approved graduate electives, relevant for the chosen emphasis area (see below) 6

Capstone Project

PADM A659	Public Administration Capstone	3
Total Credits		27

Candidates for the MPA who do not have public administration work experience must also complete 3 credits of PADM A620.

Students must take the core comprehensive examination after completing the core courses. This examination must be passed before the student may enroll in the capstone course.

Students must also complete one of the following emphasis areas: public management, public policy analysis, health administration, criminal justice, or dual emphasis: public management and public policy analysis.

Code	Title	Credits
Public Management Emphasis		
PADM A603	Management Analysis	3
PADM A610	Public and Non-Profit Organizational Behavior	3
PADM A624	Human Resources Administration and Labor Relations	3
Total Credits		9

Code	Title	Credits
Public Policy Analysis Emphasis		
PADM A628	Public Financial Management	3
PADM A632	Public Policy Analysis	3
PADM A688	Program Evaluation and Performance Measurement	3
Total Credits		9

Code	Title	Credits
Health Administration Emphasis		
HS A605	Public Health and Society	3
HS A615	Health Services Administration	3
HS A626	Principles of Epidemiology	3
Total Credits		9

Code	Title	Credits
Criminal Justice Emphasis		
9 credits of advisor-approved criminal justice electives *		9
Total Credits		9

* No more than 6 credits at the 400 level. See advisor for approved justice emphasis courses.

A total of 36-39 credits is required for the degree; dual emphasis areas may be taken for additional credits, e.g. public management and public policy analysis.

Program Student Learning Outcomes

Students graduating with a Master of Public Administration will be able to demonstrate:

- Leadership and decision making
- Communications
- Awareness of the values and tradeoffs in public service, including sustainability, citizen engagement, democratic values and transparency
- Role of financial, human, information, technology and other resources
- Knowledge of the policy process, including assessment
- Problem-solving, including the use of evidence
- Information processing and technology for effective administration

Information Systems and Decision Sciences

Edward & Cathryn Rasmuson Hall (RH), Room 304, (907) 786-4171
logistics.uaa.alaska.edu (<https://business.uaa.alaska.edu>)

The UAA Master of Science degree in Global Supply Chain Management (MS GSCM) is a 100% online program in which students working full-time anywhere in the world can develop supply chain management expertise through academic study, real-time case studies, applied simulations, and ongoing interactions with industry leaders and peers. Graduates of the MS GSCM program will be prepared to enter or advance in the global supply chain management job market with confidence and hands-on knowledge to manage leading supply chain practices, advanced information systems and technology, cost and finance factors impacting the supply chain, best practices for the human side of the global supply chain, and the ever-changing and complex requirements of the global environment and international trade. The MS program is accredited by the Association to Advance Collegiate Schools of Business (AACSB-International).

The degree requires completion of five 6-credit courses. Thirty credit hours are required to graduate and the program takes approximately twenty months to complete. A maximum of twenty-four students will be admitted and the program is entirely online. All five courses are divided into instructional modules and assignments are due on a weekly basis.

Completion of an undergraduate degree is required to begin the MS program, but a business or supply chain management undergraduate degree is not required. All students are charged resident tuition rates regardless of residency for this online program. Please contact the College of Business and Public Policy Graduate Programs office at (907) 786-4171 for tuition and application information.

Program of Study**Master of Science**

- MS in Global Supply Chain Management (p. 373)

Faculty

Alpana Desai, Professor, amdesai@alaska.edu

Yonggang Lu, Associate Professor, ylu4@alaska.edu
Philip Price, Professor, philipp@alaska.edu

Master of Science in Global Supply Chain Management

Admission Requirements

Satisfy the Admission Requirements for Graduate Degrees (p. 50).

Applicants must submit: all college transcripts, GMAT or GRE scores, two letters of recommendation, a resume of no more than three pages, and a 300-500 word personal statement describing how the Master of Science in Global Supply Chain Management (MS GSCM) will help the applicant attain his/her career or personal goals.

Applicants must take and submit scores from the GMAT or GRE. This requirement may be waived if the applicant has 3 or more years of supply chain work experience or a previously earned graduate degree in any discipline from a regionally accredited institution in the United States or a foreign equivalent.

Applicants with a lower GPA but strong professional experience will be considered for potential success in the program and are encouraged to apply.

Application fees will follow UAA guidelines.

All requirements for applicants whose native language is not English or whose baccalaureate degree was conferred by an institution where English was not the language of instruction will follow UAA testing requirements.

Academic Requirements

Students in the MS GSCM program are expected to complete a minimum of 6 credits each semester, starting with the first term of enrollment. Failure to comply with the 6 credit minimum each semester may result in a student being dropped from the program.

Students enrolled in the MS GSCM program must maintain a minimum GPA of 3.00, with no individual course grade lower than a C.

Students enrolled in the MS GSCM program must maintain and present a portfolio demonstrating their professional competencies and highlights of work completed throughout the program.

Graduation Requirements

- Satisfy the General University Requirements for Graduate Degrees (p. 346).
- Complete the program requirements.

Program Requirements

Code	Title	Credits
LOG A661	Logistics and Global Supply Chain Management: Applications and Strategy	6

LOG A665	Quantitative and Financial Performance Metrics for Global Supply Chain Management	6
LOG A664	Leadership Principles and Management Skills for Global Supply Chain Managers	6
LOG A662	Supply Chain Technology and Systems	6
LOG A663	The Role of Global Supply Chain Management in International Trade	6

A total of 30 credits is required for the degree.

Program Student Learning Outcomes

At the completion of the MS GSCM program, graduates will be able to:

1. Collect and synthesize inbound, internal, outbound, and flow information from a real world supply chain setting; identify strategic challenges observed; and propose corresponding strategic directions in supply chain management.
2. Evaluate current supply chain information systems and innovative supply chain management technology and evaluate their application in specific contexts.
3. Outline the trade agreements, market entry strategies, risks, international commercial documents and export packaging requirements, customs clearance procedures, and physical distribution factors in a global supply chain.
4. Propose and apply solutions for managing and leading others in real world global supply chain management contexts.
5. Explain and evaluate multiple factors that impact the cost of logistics and supply chain management.

Management and Marketing

Edward & Cathryn Rasmuson Hall (RH), Room 304, (907) 786-4171
www.business.uaa.alaska.edu (<https://www.uaa.alaska.edu/cbpp>)

The College of Business and Public Policy offers a Master of Business Administration (MBA) in General Management as well as transcripted emphasis areas in: business intelligence and business analytics, global supply chain management, health administration, leadership, and public sector and non-profit management. The MBA program is accredited by the Association to Advance Collegiate Schools of Business (AACSB-International).

Program Policies and Administration

The faculty reserves the right, where warranted by evaluation of a student's progress and apparent knowledge, to require additional coursework or other preparation to ensure the degree candidate possesses adequate professional skills and capabilities. This includes the ability to reason and communicate effectively.

The MBA program is the responsibility of CBPP's graduate faculty, which acts as a policy-setting body and as an appeals board.

Contact the CBPP Graduate Programs Office for full program information, including application forms and procedures.

*Graduate Programs Office
UAA College of Business and Public Policy*

Physical Address: *Rasmuson Hall, Room 304, 3416 Seawolf Drive, Anchorage, AK*
Mailing Address: *3211 Providence Drive, RH 304, Anchorage, AK 99508, U.S.A.*
Telephone: *(907) 786-4171*
Fax: *(907) 786-4115*

Program of Study

Master of Business Administration

- MBA in General Management (p. 374)

Faculty

Jonathan Alevy, Associate Professor, jalevy@alaska.edu
Kevin Berry, Assistant Professor, kberry13@alaska.edu
Nalinaksha Bhattacharyya, Professor, afnb@alaska.edu (AFNB@alaska.edu)
Kori Callison, Associate Professor, krcallison@alaska.edu
Yong Cao, Professor, ycao@alaska.edu (AFYC@alaska.edu),
Ajit Dayanandan, Professor, adayananadan@alaska.edu
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Bogdan Hoanca, Professor, bhoanca@alaska.edu (AFBH@alaska.edu)
Gökhan Karahan, Associate Professor, gkarahan@alaska.edu
Yonggang Lu, Associate Professor, ylu4@alaska.edu (AFYL@alaska.edu)
Christina McDowell, Associate Professor, cmcdowell2@alaska.edu
Terry Nelson, Associate Professor, Director of CBPP Graduate Programs, terry.nelson@alaska.edu (tnelson15@alaska.edu)

Philip Price, Professor, pmprice@alaska.edu

Larry Ross, Professor, llross@alaska.edu

Master of Business Administration in General Management

The MBA in General Management provides students with perspectives and skills to prepare them for increasingly significant managerial and leadership roles.

The focus of the program is management practice, recognizing that sound practice requires a thorough understanding of underlying management principles and techniques. Our MBA graduates will be thoroughly grounded in state-of-the-art management theory and practice and aware of the complex global environment in which modern organizations operate.

The program serves full and part-time students, and classes are typically scheduled on weekday evenings or Saturdays. Most courses are offered in fall and/or spring, with a limited number offered in summer.

Students interested in pursuing the MBA with an emphasis in business intelligence and business analytics can complete one additional class and an additional project to receive the SAS Data Mining Certificate, an industry-recognized professional certificate. Information about this nonacademic certificate can be found here (<https://business.uaa.alaska.edu/academics/graduate/mba/sas.cshtml>).

Admission Requirements

Applicants must meet both the Admission Requirements for Graduate Degrees (p. 50) and the College of Business and Public Policy (CBPP) requirements outlined here.

Undergraduate cumulative GPA of 3.25 or a GMAT score of 525 or greater is required for acceptance into the program. A GMAT quantitative score of the 30th percentile or higher is preferred for the Quantitative section*. If the score is less than the 30th percentile, students may be required to take a quantitative foundation course.

GMAT waivers may be considered for applicants who meet any of the following criteria:

- Hold another relevant master's degree from an accredited university.
- Hold a terminal degree from an accredited university.
- Have an undergraduate cumulative GPA of 3.25 or higher or a cumulative GPA of 3.25 or higher for upper-division courses.

Additional indicators for predicting success in individual cases may be provided through documented evidence of creativity and leadership, or a sustained record of accomplishment in business or other professional activity.

Each applicant must submit the following to the UAA Office of Admissions as part of their application materials:

- A statement of purpose.
- A resume, including the names and contact information of three references.

Applicants whose native language is not English must score at least 80 (Internet-based exam scale) on the Test of English as a Foreign Language (TOEFL). Students may apply to enter the program by the published university deadlines. International students will need to provide extra documentation and are advised to apply three months earlier to allow for the extra processing time.

*All students must meet a quantitative skills requirement to be admitted.

Graduation Requirements

- Satisfy the General University Requirements for Graduate Degrees (p. 346).
- Complete the program requirements below.

Program Requirements

All students must complete the following foundation courses. Advisors may, however, waive one or more of the foundation courses if the student has satisfactorily completed disciplinary equivalent coursework.

Code	Title	Credits
Foundation Courses		
ACCT A601	Accounting Foundations for Executives	3
BA A603	Fundamentals of Finance	3
ECON A602	Introduction to Economics for Managers	3
Total Credits		9

Students can select a General MBA degree which requires 30 credits or a General MBA degree with an emphasis which requires 36 credits.

Code	Title	Credits
Core Courses		
ACCT A650	Seminar in Executive Uses of Accounting	3
BA A610	Business Intelligence and Analytics	3
BA A632	Leadership and Organizational Behavior	3
BA A635	Current Marketing Issues Seminar	3
BA A636	Financial Decision Making	3
BA A686	Management Simulation	3
ECON A625	Economics and Public Policy	3
Total Credits		21
Electives		

Students select two electives for a General MBA or one elective for a General MBA with an Emphasis.

Students may take courses in the emphasis areas (see below) or any advisor approved CBPP graduate course as elective courses including public administration courses. Also with the advisor's approval, elective coursework can be selected from graduate courses offered by other colleges or disciplines within UAA, or graduate courses offered by other universities accredited by AACSB International. Up to two 400-level courses not previously applied towards another degree may be taken as electives for the entire degree, with the advisor's approval and only if graduate course offerings are not available on those topics.

Total Elective Credits for a General MBA		6
Total Elective Credits for a General MBA with an Emphasis*		3

*Global Supply Chain Management emphasis does not require an elective

Capstone Course

Select one course based on preferred nature of experience (practical or academic) and application (applied or theoretical):

BA A655	Strategic Management Seminar
BA A656	Management Project
BA A698	MBA Individual Research

Total Capstone Credits 3

Total General MBA Credits 30

Total General MBA with an Emphasis Credits 36

Emphasis Area/Elective Coursework

Emphasis Area: By selecting courses in a particular business-related discipline, students can design a custom emphasis area (not transcripted) or can choose one of the emphasis areas below (transcripted in accordance to the UAA Catalog). Students must complete at least 9 additional credits to fulfill an emphasis.

Elective Coursework: Students may select electives from the courses listed below.

Code	Title	Credits
Business Intelligence and Business Analytics Emphasis		
BA A633	Problem Formulation and Decision Analysis	3
BA A648	Business Intelligence and Data Mining	3
BA A649 or CIS A670	Advanced Business Data Analysis Data Warehouse and Business Intelligence	3
Total Credits		9

Code	Title	Credits
Leadership Emphasis		
Complete 9 credits from the following:		9
BA A621	Change Leadership and Facilitation	
BA A627	Leadership in the Multicultural Organization	
BA A628	Executive Leadership	
BA A629	Negotiation and Conflict Management	
BA A631	Business Environment Analysis	
With the advisor's approval, a student may select a 400-level leadership course to complete the leadership emphasis.		
Total Credits		9

Code	Title	Credits
Public Sector and Non-Profit Management Emphasis		
Complete 9 credits from the following:		9
PADM A601	Introduction to Public Administration	
PADM A602	Seminar in Public Management and Leadership	
PADM A603	Management Analysis	

PADM A606	Public Policy-making Process
PADM A608	Organizational Theory, Design and Development
Total Credits	
9	

Code	Title	Credits

Health Administration Emphasis

Complete at least 9 credits of 600-level advisor-approved health science-related electives not applied to another undergraduate or graduate degree. Recommended courses include HS A605, HS A624, HS A626/NS A626, HS A628/SWK A628, HS A630, HS A683/SWK A683 and HS A690.		9

Total Credits		9

Code	Title	Credits

Global Supply Chain Management

Complete at least two of the 6 credit courses. If a student selects this option, an elective is not required from the elective section above.		12

LOG A661	Logistics and Global Supply Chain Management: Applications and Strategy
LOG A662	Supply Chain Technology and Systems
LOG A663	The Role of Global Supply Chain Management in International Trade
LOG A664	Leadership Principles and Management Skills for Global Supply Chain Managers
LOG A665	Quantitative and Financial Performance Metrics for Global Supply Chain Management

Total Credits		12

A minimum of 30 credits is required for a General MBA and 36 credits is required for a General MBA with an emphasis. Additional credits are required for students who need to take foundation courses.

Program Student Learning Outcomes

Upon graduation, MBA program graduates will possess or show ability in the following areas as defined by these MBA Learning Goals:

1. Develop an understanding of the organization as a complex goal-seeking system interacting with and adapting to the dynamics of its external environment.
2. Demonstrate an understanding of the key elements and tools of business performance improvement.
3. Demonstrate effective communication skills utilizing a variety of tools and media suited to specific situations.
4. Describe characteristics of leadership in settings at the organizational, team, and individual level.
5. Demonstrate the ability to solve complex business problems.

6. Demonstrate an understanding of social responsibility and ethical reasoning, and be able to apply it to decision making in a business organization.

School of Education

www.uaa.alaska.edu/academics/school-of-education

The University of Alaska Anchorage is in full compliance with the institutional reporting requirements mandated in Title II of the Higher Education Act Amendments of 1998. Please contact the School of Education for a copy of the completed report.

The School of Education comprises a community of educators dedicated to improving the quality of education. The mission of the School of Education is to prepare educators and support the lifelong learning of professionals to embrace diversity and to be intellectually and ethically strong, resilient and passionate in their work with Alaska's learners, families, educators and communities. School of Education programs emphasize the power of learning to transform people's lives. Across the university, faculty members teach professional educators to work in diverse settings to form and sustain learning partnerships, and to provide learning across the life span. The School is confident that this preparation will result in educators' significant contributions to society.

The School of Education promotes the following core values in their collegial interactions to ensure that program graduates exhibit:

- Intellectual vitality: Professional educators examine diverse perspectives, engage in research and scholarship, contribute to knowledge and practice, and apply innovations in technology.
- Collaborative spirit: Professional educators generate, welcome and support the collaborative relationships and partnerships that enrich people's lives.
- Inclusiveness and equity: Professional educators create and advocate for learning communities that advance knowledge and ensure the development, support and inclusion of people's abilities, values, ideas, languages and expressions.
- Leadership: Professional educators are committed to the highest standards of ethical behavior in their roles, using professional expertise to improve the communities in which they live and work, and demonstrating the ability to translate theories and principles into transformative educational practice.

The school believes that learning must be designed, delivered and evaluated within the contexts of these core values and program outcomes.

The school offers undergraduate and graduate curricula and programs designed to prepare personnel for various professional roles related to education in a variety of learning environments. The School of Education is accredited by the Council for Accreditation of Educator Preparation (CAEP). Our professional preparation programs are approved by the Alaska Department of Education and Early Development and are based on CAEP standards.

The Alaska Department of Education and Early Development issues certificates and endorsements under the "approved program" process

for certification. UAA recommends individuals to the commissioner of Education and Early Development for certification or endorsement after successful completion of one or more of the approved programs. Only the director of the School of Education is authorized to recommend candidates for the appropriate certificate or endorsement.

In each of the school's curricula and programs, candidates are introduced to fundamental issues of education in the contemporary world through courses designed to develop perspective and understanding of the relationship of education to society. Courses provide theory and practice in the development of instructional materials and an understanding of methods of instruction. Many courses and programs are offered through distance delivery methods. The school offers high-quality, distance-delivered coursework in order to improve access for rural students and provide flexible scheduling for practicing educators. Additionally, the school partners with UAA community campuses in optimizing the use of technology for distance delivery through intercampus collaboration.

Students are formally admitted to an appropriate program on the basis of multiple criteria, including their ability to make a positive contribution to educational professions. Candidates who seek Alaska state licensure must successfully complete the school's "approved program," as well as any additional requirements that may be initiated by the Alaska Department of Education and Early Development. Only courses with a grade of C or higher will be applied to meet certification or endorsement requirements. Some programs require a minimum grade of B. In addition, candidates must demonstrate professional behaviors and dispositions consistent with the School of Education's Conceptual Framework as well as abide by the UAA Student Code of Conduct and the Code of Ethics and Professional Teaching Standards adopted by the Alaska Professional Teaching Practices Commission. These documents are available on the School of Education website (<http://www.uaa.alaska.edu/coe>).

An advisor develops a graduate studies plan with each candidate based upon transfer credits, program requirements and elective courses. The program may or may not include certification or endorsement requirements.

The School of Education has two academic departments:

- The Department of Graduate and Advanced Certification, 786-4450
- The Department of Undergraduate and Initial Certification, 786-4412

Master of Education

Within the curriculum of the MEd program are several options, each with its own set of specific requirements. Each is designed to provide the student with initial or advanced preparation in professional education. Some also lead to endorsement or certification. MEd options are:

1. Counselor Education - admission suspended
 - a. School Counseling (K-8, 7-12, or both)
 - b. Community Agency Counseling
2. Early Childhood Special Education

3. Educational Leadership
4. Special Education
5. Teaching and Learning

See MEd Requirements (p. 377) for more information on admission and graduation requirements.

Graduate Certificates

The School of Education offers five graduate certificate programs:

1. Counselor Education - admission suspended
2. Educational Leadership: Principal
3. Educational Leadership: Superintendent — *admission suspended*
4. Language Education: English as a Second Language (ESL) and Culturally Sustaining Pedagogy Concentration
5. Special Education.

Each program is designed to provide the student with initial or advanced preparation in professional education. With the exceptions of Counselor Education, successful completion of the programs leads to an institutional recommendation for a state certificate or endorsement. Admitted students must have the technological knowledge and skills to engage in distance learning.

Coursework that is applied to graduate certificates may also apply to the MEd with faculty advisor approval.

Professional Field Practice

See Field Placement (p. 378) for description of requirements for admission and performance in internships.

Field Placements

Most School of Education graduate programs require field experiences in school or agency settings. The School of Education works with Alaska school districts to offer diverse placements for students. Diversity of placements refers to grade levels and types of schools. It is our policy to, whenever possible, ensure students receive diverse placements in schools and grade levels. Students who live in rural district will be placed in the most diverse placements possible in their location.

See Field Placement (p. 378) for description of factors affecting field placements with cooperating school districts.

Continuous Progress

School of Education graduate certificate candidates must demonstrate continuous progress toward program completion. Candidates must complete at least one approved program course during any 24-month consecutive period to maintain active status in their programs. Candidates not making continuous progress and not on an approved leave of absence may be removed from certificate-seeking status.

MEd Admission Requirements

In some cases, applicants may be contacted about providing writing samples or for scheduling personal interviews with the department after their completed files are received. When all documents are received

and reviewed by the department, the applicant will be notified of the department's decision.

Applicant files are reviewed throughout the year. However, applications for admission need to be submitted by specific dates (July 1, November 1, and May 1) to qualify for financial aid.

Applicants must:

1. Satisfy Admission Requirements for Graduate Degrees (p. 50).
2. Have a GPA of 3.00 (on a 4.00 point scale) in the last 30 credits.
3. Satisfy the admission requirements as specified by the appropriate program. In general, programs require submission of a resume documenting professional experience, goal statements and professional references. Some programs may require teacher certification. Departments may request writing samples or interviews as part of the admission process.

Applicants who meet the above criteria are considered for program admission on a competitive basis.

Academic Requirements

Graduate students must demonstrate continuous progress toward program completion. School of Education candidates must complete at least one approved program course during any 24-month consecutive period to maintain active status in their programs. Candidates not making continuous progress and not on an approved leave of absence (see Leave of Absence in Graduate Degree Policies (p. 349)) may be removed from master's degree-seeking status.

Graduate Studies Plan

An official graduate studies plan (GSP) must be approved before completion of more than 12 credits of coursework.

Graduation Requirements

Candidates completing the MEd must complete the following requirements:

- Satisfy the General University Requirements for Graduate Degrees (p. 346) and master's level graduation requirements.
- Specific programs may require more than 30 credits. See appropriate program for credit requirements.
- Satisfy the requirement of a comprehensive examination, comprehensive portfolio or other scholarly work as specified by the program.

Graduate courses completed prior to being admitted as a graduate student will not necessarily be applicable toward a specific graduate degree program.

Institutional Recommendation

Following are the requirements for an institutional recommendation for those programs leading to a recommendation for certification or endorsement:

1. For endorsements, all requirements for a current teacher certificate must be successfully met.

2. For Principal Type B Administrative Certificates, candidates must have three years of successful certificated contract experience as a teacher or special services provider (Type C). In addition, a minimum of a master's degree is required.
3. For the Principal Type B Certificate, the MEd must be conferred.
4. For the Type F Special Education Administration Certificate, candidates must have three years of successful contract experience as a special services provider. The certificate is restricted to those candidates who hold a Type C Special Services Certificate with an endorsement in school psychology, speech-language pathology or school counseling. In addition, a minimum of a master's degree is required.
5. For the Type B Administrative Certificate with an endorsement in special education administration, candidates must have three years of successful certificated contract experience as a special education teacher. In addition, a minimum of a master's degree is required.
6. Demonstration of basic computer/technology competence. See specific programs for additional information.

Certification is awarded by the State of Alaska Department of Education and Early Development (EED) in Juneau. Graduates must meet all requirements specified by EED at the time of application for the certificate.

Professional Field Practice

Prior to permitting the candidate to enter the final stage of preparation, which is characterized in most options by participation in a practicum or internship, a faculty committee will evaluate the candidate's performance in the program. Admission into this final phase of professional preparation is a faculty decision and is separate from entry into the graduate program. Difficulties, including inadequate academic performance, unprofessional behavior, unsatisfactory field reports or other factors, may result in denial of entry to practicum or internship. Performance in practicum and internship is closely monitored, with stated minimum competencies and the development of individual objectives. Since this is the practice and application phase of professional development, it is assumed that candidates will demonstrate appropriate professional dispositions with respect to their professional actions, attitude and performance.

The Alaska Department of Education and Early Development issues certificates/endorsements as a result of successful program completion as verified by the director and department chair.

Field Placements

Most School of Education graduate programs require field experiences in school or agency settings.

Criminal History Background Clearance

The School of Education requires compliance with specific background clearance policies and procedures for candidates participating in university-sponsored fieldwork and those enrolling in coursework offered at the Providence Early Learning Lab (PELL). In some cases, criminal history background clearance is required for admission to a department or program. In addition to self-disclosure of criminal history to the School of Education and its partners, a check of the Alaska and

national sex offender registries, a fingerprint-based check by the Federal Bureau of Investigation, and a name-based check through the Alaska Public Safety Information Network may be required. Various agencies and centers may have additional requirements.

Failure to comply with the School of Education background check requirements will result in denial of access to field placement settings or PELL. Failure to pass the criminal history background check will result in removal from the program. More information is available on School of Education website (<http://www.uaa.alaska.edu/coe>).

Cooperating School/Agency

Practica, internships and other field placements are made only in cooperation with participating school districts and agencies. The school districts and agencies that work with the School of Education reserve the right to request additional information and/or preparation from candidates in accordance with their established policies/practices. Cooperating districts and agencies also determine the number of available spaces and placements for candidates. Placements may become competitive if the number of applicants exceeds the number of spaces. Districts and agencies also reserve the right to refuse or terminate placements when candidates do not meet an acceptable standard of performance. Thus, while the university makes every effort to find appropriate field placements for candidates, admittance to a degree/certificate/endorsement program does not guarantee acceptance by cooperating school districts or agencies. Unacceptable academic performance, an unprofessional attitude, unsatisfactory field reports, violation of professional ethics or other factors may result in removal from the field placement.

Transfer

Candidates who have taken all or part of an approved program at another university must take at least 9 credits of approved education courses at the University of Alaska prior to being admitted to an advanced practicum or internship.

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Counseling

www.uaa.alaska.edu/academics/school-of-education (<https://www.uaa.alaska.edu/academics/school-of-education>)

Programs of Study

Master of Education

- MEd in Counselor Education (p. 379)

Graduate Certificate

- Certificate in Counselor Education (p. 379)

Master of Education in Counselor Education

Admission to this program is currently suspended. Contact the School of Education for more information.

Graduate Certificate in Counselor Education

Admission to this program is currently suspended. Contact the School of Education for more information.

Early Childhood/Special Education

www.uaa.alaska.edu/academics/school-of-education (<https://www.uaa.alaska.edu/academics/school-of-education>)

Program of Study

Master of Education

- MEd in Early Childhood Special Education (p. 379)

Master of Education in Early Childhood Special Education

The MEd in Early Childhood Special Education encompasses theory, research and practice relating to children from birth to 5 years of age who experience developmental delays and disabilities. In addition to the degree, this program leads to an institutional recommendation for initial teacher certification or endorsement in Early Childhood Special

Education-Birth to Five on an existing certificate from the Alaska Department of Education and Early Development (EED).

The Masters of Education (M.Ed.) in Early Childhood Special Education provides candidates with a holistic, inclusive, family-centered approach to assist families and support the development of young children with disabilities and developmental delays with a focus in the birth to age 5 range.

Admission Requirements

- Satisfy the Admission Requirements for Graduate Degrees (p. 50) and the School of Education MEd Admission Requirements (p. 377).
- Satisfy the prerequisites for admission to the M.Ed. in Early Childhood Special Education, which include 6 credits in Child Development/Early Childhood Education (EDSE A212 or PSY A365) and (EDSE A311Y or EDEC A303) or other approved courses by advisement. Contact the Graduate Studies Department at (907) 786-4450.
- Submit an application to the M.Ed. in Early Childhood Special Education Program. Contact the Graduate Studies Department at (907) 786-4450.

The School of Education provides coursework through a variety of methodologies and delivery formats, including distance education. This program includes courses delivered by distance. Candidates must have the technological knowledge, skills and access to equipment to engage in distance learning.

Graduation Requirements

- Satisfy the General University Requirements for Graduate Degrees (p. 346) and the School of Education MEd Graduation Requirements (p. 377).
- Satisfactorily complete the Special Education - Preschool/Early Childhood Praxis II.
- Complete an internship and professional portfolio documenting attainment of Council for Exceptional Children (CEC) standards.
- Complete the program requirements below.

Candidates admitted or seeking admission to the M.Ed. in Early Childhood Special Education must receive approval from their advisor prior to taking coursework from another institution intended to satisfy requirements for the master's degree.

Program Requirements

Code	Title	Credits
Early Childhood Special Education Courses		
EDSE A607	Foundations for Infant and Toddler Social Emotional Health and Development	3
EDSE A610Y	Assessment of Infants & Toddlers in Early Childhood Special Education	3
EDSE A611Y	Assessment in Preschool Special Education	3

EDSE A622Y	Strategies and Interventions: Infant and Toddler Special Education	3
EDSE A623Y	Strategies and Interventions: Preschool Special Education	3
EDSE A674	Family Partnerships in Early Childhood Special Education	3
EDSE A692Y	Internship Seminar in Early Childhood Special Education Teaching **	1-2
EDSE A695Y	Advanced Internship: Early Childhood Special Education **	6

Additional Required Courses

EDRS A660	Fundamentals of Research in Education *	3
EDSE A632	Special Education Law: Principles and Practices	3
Research elective by advisement *		3
Elective by advisement		3
Total Credits		37-38

* EDRS A660 and research credits by advisement may be waived for candidates entering the program with a master's degree.

** Candidates who hold a current Special Education - Early Childhood teaching certificate or endorsement may waive EDSE A692Y and EDSE A695Y and replace with advisor approved courses.

A minimum of 37 credits is required for the degree.

Field Placement

Some courses in the early childhood special education program require field placements and/or internship placements. The School of Education does not guarantee placements as they are contingent on school district and agency partners. The university offers placements across the state of Alaska. Out-of-state placements will require additional approvals and are not guaranteed. See School of Education Field Placements (p. 378).

Graduate Certificate in Children's Mental Health (optional)

Candidates in the M.Ed. in Early Childhood Special Education can apply for admission into the Graduate Certificate in Children's Mental Health. Visit www.uaa.alaska.edu/academics/college-of-arts-and-sciences/departments/psychology/academic-programs/graduate/childrens-mental-health-graduate-certificate.chtml for more information.

Admission to Early Childhood Special Education Internship

1. Submit an application form for admission to Early Childhood Special Education Internship. Contact the School of Education Student Services office for fall and spring application deadlines at (907) 786-4401.

2. A current Student Teaching Authorization Certificate is required for admission to internship (finger printing and criminal background check process).

Note: Admission to the Early Childhood Special Education M.Ed. program does not guarantee admission to the internship.

State Approved Verification Form & Alaska Teacher Certification

The following are requirements for a state-approved verification form for a special education certificate or endorsement in Special Education - Early Childhood Birth - Preschool. Students who already hold a teaching certificate may receive a State Approved Verification for a birth - preschool special education endorsement on the existing certificate.

- Completed all applicable prerequisite courses with a minimum grade of B.
- Completed all required courses with a minimum overall GPA of 3.00, with no grade lower than a C.
- Completed all graduation requirements noted above.

Additional requirements for an initial teaching certification within the state of Alaska (including an Alaska Studies Course and a Multicultural Course) can be found at the Alaska Department of Education and Early Development (<http://www.eed.state.ak.us>) website. (<http://www.eed.state.ak.us>)

Program Student Learning Outcomes

Student outcomes for the program are based on the Council for Exceptional Children (CEC) standards (<https://www.cec.sped.org/Standards/Special-Educator-Professional-Preparation-Standards>) and the Division of Early Childhood Special Education standards (<http://www.dec-sped.org>).

Students who complete this program will be able to:

- Apply legal and ethical policies that affect young children with developmental delays and disabilities, families, and programs for young children.
- Use intervention strategies with young children having developmental delays and disabilities and their families that affirm and respect family, cultural, and linguistic diversity.
- Develop and apply instructional practices based on knowledge of the child, family, community, and the curriculum.
- Design, implement, and evaluate environments to ensure developmental and functional appropriateness.
- Assess the development and learning of young children with developmental delays and disabilities and use that information to direct intervention.

- Critically analyze and apply principles of research in the area of early childhood special education.

Educational Leadership

www.uaa.alaska.edu/academics/school-of-education (<https://www.uaa.alaska.edu/academics/school-of-education>)

Programs of Study

Master of Education

- MEd in Educational Leadership (p. 381)

Graduate Certificate

- Certificate in Educational Leadership: Principal (p. 382)
- Certificate in Education Leadership: Superintendent (p. 383)

Master of Education in Educational Leadership

The MEd in Educational Leadership is designed for individuals seeking advanced professional preparation to become school leaders. The program specifically prepares individuals for principal or teacher leadership positions. The options include:

- Principal (with Type B certificate)
- Teacher Leadership (without Type B certificate) — *admission suspended*

Students completing the MEd in Educational Leadership principal option are eligible for an institutional recommendation for an administrator certificate to serve as school principals.

Admission Requirements

1. Satisfy the Admission Requirements for Graduate Degrees (p. 50) and the School of Education MEd Admission Requirements (p. 377).
2. Have at least three years of experience as a certificated elementary teacher, secondary teacher or special services provider (Type C).
3. Hold a current teacher certificate or provide evidence of eligibility for an Alaska Teacher Certificate.
4. Submit an educational goal statement.
5. Submit three letters of recommendation or rating forms. At least one rating form must be from an educational supervisor who has evaluated the candidate.

Background Check Requirements

See School of Education Field Placements (p. 378).

Graduation Requirements

- Satisfy the General University Requirements for Graduate Degrees (p. 346).
- Complete the program requirements below.

Program Requirements

Principal (with Type B Administrator Certificate)

This program includes courses delivered by distance. Admitted students must have the technological knowledge and skills to engage in distance learning (See Educational Leadership Program Handbook).

Code	Title	Credits
Foundation Core		
EDL A610	Orientation to Graduate Studies in Leadership	2
EDL A620	Leadership in Alaska Culture and Social Justice Issues	3
Research Foundation		
EDRS A660	Fundamentals of Research in Education	3
EDRS A661	Data-Informed Instruction and Decision Making	3
Principal Core		
EDL A637	Organizational Theory and Change	3
EDL A638	Instructional Leadership and Student Learning	3
EDL A639	Politics, Law and Ethics in Leadership	3
EDL A644	School Resource Allocation and Management	3
EDL A692A	Principal Seminar I	3
EDL A692B	Principal Seminar II	3
EDL A695	Principal Internship	6
Total Credits		35

A comprehensive portfolio documenting attainment of ELCC standards and completion of the School Leaders Licensure Assessment is required.

A total of 35 credits is required for the degree and to apply for an institutional recommendation for a Type B Administrator Certificate from the Alaska Department of Education and Early Development (EED).

Program Student Learning Outcomes

Student learning outcomes for the MEd in Educational Leadership are based on the Educational Leadership Constituent Council (ELCC) Standards for School Leaders. Students who complete the Educational Leadership degree program will be able to:

- Facilitate the development, implementation, and monitoring of a shared vision of learning, involving all stakeholders.
- Shape, nurture and sustain a school culture and instructional program based on student learning and professional growth.
- Ensure effective management of operations and resources for a safe, efficient and effective learning environment.

- Collaborate with family and community members to mobilize community resources to respond to diverse community interests and needs.
- Act with integrity and fairness in an ethical manner.
- Understand, respond to, and influence the larger political, social, economic, legal and cultural context.

Graduate Certificate in Education Leadership: Principal (K-8, 7-12, or K-8 & 7-12)

The Graduate Certificate in Educational Leadership: Principal is designed for individuals with master’s degrees who are seeking advanced professional preparation to become principals.

Admission Requirements

- Satisfy the Admission Requirements for Graduate Certificates (p. 50).
- Hold a master’s degree from a regionally accredited institution.
- A minimum of 6 credits in graduate-level educational research methodology.
- Hold appropriate certification: current teacher or special services provider (Type C) certificate or equivalent for Graduate Certificate in Educational Leadership: Principal.
- Provide a resume documenting educational experience including at least three years of experience as a certificated elementary teacher, secondary teacher or special services provider (Type C).
- Submit an educational goal statement.
- Submit three letters of recommendation or rating forms from professional references. At least one of the professional references must be from a current educational supervisor who has evaluated the candidate.

Background Check Requirements

See School of Education Field Placements. (p. 378)

Graduation Requirements

- Satisfy the General University Requirements for Graduate Certificates (p. 353).
- Complete the program requirements below.

Program Requirements

This program includes courses delivered by distance. Admitted students must have the technological knowledge and skills to engage in distance learning (See Educational Leadership Program Handbook).

Code	Title	Credits
EDL A610	Orientation to Graduate Studies in Leadership	2
EDL A637	Organizational Theory and Change	3
EDL A638	Instructional Leadership and Student Learning	3

EDL A639	Politics, Law and Ethics in Leadership	3
EDL A644	School Resource Allocation and Management	3
EDL A692A	Principal Seminar I	3
EDL A692B	Principal Seminar II	3
EDL A695	Principal Internship	6
Total Credits		26

Complete portfolio documenting attainment of Educational Leadership Constituent Council (ELCC) standards and completion of the School Leaders Licensure Assessment is required.

Complete a total of 26 credits for the certificate and to apply for an institutional recommendation for the Type B Administrator Certificate with a principal endorsement from the Alaska Department of Education and Early Development (EED).

Program Student Learning Outcomes

Student outcomes for these certificates are based on the Educational Leadership Constituent Council (ELCC) Standards for School Leaders. Students who complete the Educational Leadership Graduate Certificate programs will be able to:

1. Facilitate the development, implementation, and monitoring of shared vision of learning, involving all stakeholders.
2. Shape, nurture, and sustain a school culture and instructional program based on student learning and professional growth.
3. Ensure effective management of operations and resources for safe, efficient, and effective learning environment.
4. Collaborate with family and community members to mobilize community resources to respond to diverse community interests and needs.
5. Act with integrity and fairness in an ethical manner.
6. Understand, respond to, and influence the larger political, social, economic, legal, and cultural context.

Graduate Certificate in Education Leadership: Superintendent (K-12)

Admission to this program is currently suspended. Contact the School of Education for more information.

Secondary Education

www.uaa.alaska.edu/academics/school-of-education/ (<https://www.uaa.alaska.edu/academics/school-of-education>)

Program of Study

Master of Arts

- MA in Teaching (p. 383)

Master of Arts in Teaching

The Master of Arts in Teaching (MAT) is a secondary education certification program intended to prepare students for a career in teaching. It is an intensive experience for the dedicated graduate student who has both academic preparation in a content area taught in the public schools and significant life experience. The secondary education certificate program integrates coursework and field experiences to meet Alaska and national teacher education standards. Graduates of the secondary education program are prepared to become educators who are:

- Excited about teaching and learning in content-based classrooms.
- Committed to a life of thoughtful practice.
- Dedicated to working with all children, their families and support personnel.
- Knowledgeable in the appropriate subject matter and skilled in how to teach it.
- Committed to the highest standards of professional ethics.

Admission Requirements

The application deadline for the secondary education certification program is April 15. Students must apply for admission to both the University of Alaska Anchorage and the School of Education.

Admission to the program is competitive and based on a review of the applicant's credentials. Applicants must complete the secondary education certification program application packet available from the school website (<http://www.uaa.alaska.edu/coe>). It must include the following:

1. Satisfy the Admissions Requirements for Graduate Degrees (p. 50).
2. Successfully complete the Praxis Core: Academic Skills for Educators. *Note: when taking the exam, please check UAA as a receiving institution.*
3. Demonstrate evidence of content area preparation aligned with areas of content-specific teaching endorsement (Biology, Chemistry, Earth Science, English/Language Arts, Mathematics, Music, Physical Education, Physics, Social Studies, or World Languages) through a Content Preparation Review conducted and approved by an appropriate school of Education faculty advisor.
4. Submit an essay addressing questions based on the secondary education certification program purpose and outcomes, as described in the application packet.
5. Submit two letters of recommendation that speak directly to the applicant's qualifications and experience with children and adolescents to be admitted to the secondary education certification program and her/his choice of teaching as a career. At least one of the letters should address the academic expertise in the endorsement area.

Note: Qualified applicants are accepted on a space-available basis. Admission to the secondary education certification program does not guarantee admission to the advanced practicum or internship.

Admission to the Internship*

To apply for the internship, students must complete the following:

1. Submit an application form for admission to the internship. Contact SOE Student Services for more information.
2. Earn a passing score on the state approved Praxis Content Area Examination for your content area. Specific DEED approved tests required for the program are identified in the program application packet. *Note: when taking the exam, please check UAA as a receiving institution.*
3. Submit completed State of Alaska Student Teacher Certification Authorization application form. The State of Alaska requires fingerprinting and a background check prior to internships in public schools. The School of Education requires compliance with specific background clearance policies and procedures for candidates participating in university-sponsored fieldwork. Failure to pass the criminal history background check or failure to comply with the School of Education background check requirements will result in removal from the program. Contact SOE Student Services for more information.
4. Complete school district specific application for internship placement. Contact SOE Student Services for more information.

* *Students seeking certification in K-12 content areas (Music and Physical Education) begin internships in the fall semester; students seeking certification in secondary education (7-12) content areas (Biology, Chemistry, Earth Science, English/Language Arts, Mathematics, Physics, Social Studies, or World Languages) begin internships in the spring semester. Contact SOE Student Services for specific deadlines for admission to the internship.*

Additional Information

- Students enrolled in the secondary education certification program must maintain a minimum GPA of 3.00, with no individual course grade lower than a C, or B where specified. EDFN A478 and EDFN A649 require a minimum grade of B. Courses with grades less than a C, including those used to demonstrate content knowledge on the Content Preparation Review, may not be applied to meet certification or endorsement requirements.
- The internship is a full-time placement in a public-school setting. Interns are expected to be present in schools the same hours as school district teachers. Reference the Internship Handbook for more detailed information.
- All program requirements and internships must be completed successfully in order to obtain a State-Approved Program Verification Form for teacher certification.

Graduation Requirements

- Satisfy the General University Requirements for Graduate Degrees (p. 346).
- Complete the program requirements below.

Program Requirements

There are two grade level options in the secondary education certification program: secondary education (7-12) and K-12. The grade

level option an applicant selects is based on the teaching endorsement area.

Secondary Education 7-12

Secondary education (7-12) teaching endorsement areas are:

- Biology
- Chemistry
- Earth Science
- English/Language Arts
- Mathematics
- Physics
- Social Studies
- World Languages

Code	Title	Credits
Foundation Courses		
EDFN A478	Issues in Alaska Native Education, K-12 *	3
EDFN A601	Educational Philosophy, History and Sociology	3
Core Courses		
EDFN A641	Place, Culture and Responsibility	3
EDFN A649	Capstone Seminar: Inquiry in Teaching and Learning *	2
EDSE A637	Inclusive Teaching and Learning in Content Area Classrooms	3
EDSY A644	Learning Environments in Secondary Classrooms	3
EDSY A648	Developing Literacies in the 21st Century Classroom	3
Methods Courses		
EDSY A661	Assessment in Secondary Classrooms	3
Select one of the following:		3
EDSY A663	Teaching English/Language Arts in Secondary Schools	
EDSY A664	Teaching Social Studies in Secondary Schools	
EDSY A665	Teaching Mathematics in Secondary Schools	
EDSY A667	Teaching World Language in Secondary Schools	
EDSY A669	Teaching Science in Secondary Schools	
Field Experiences		
EDFN A695	Internship	9
Total Credits		35

* *Minimum grade of B required. With departmental approval, EDFN A478 may be taken before formal admission to the secondary education certification program. If EDFN A478 is taken as part of an undergraduate program, it may be waived for the program.*

Candidates must also successfully complete a comprehensive portfolio demonstrating that they have met all of the applicable standards and a content-specific comprehensive exam.

A total of 35 credits is required for the degree.

K-12

K-12 teaching endorsements areas are:

- Music
- Physical education

Code	Title	Credits
Foundation Courses		
EDFN A478	Issues in Alaska Native Education, K-12 *	3
EDFN A601	Educational Philosophy, History and Sociology	3
Core Courses		
EDFN A641	Place, Culture and Responsibility	3
EDFN A649	Capstone Seminar: Inquiry in Teaching and Learning *	2
EDSE A637	Inclusive Teaching and Learning in Content Area Classrooms	3
EDSY A644	Learning Environments in Secondary Classrooms	3
EDSY A648	Developing Literacies in the 21st Century Classroom	3
Methods Classes		
Select one of the following sequences:		6
MUS A668A & MUS A668B	Methods for Teaching Music I, K-12 and Methods for Teaching Music II, K-12	
PEP A645 & PEP A646	Methods in Elementary Physical Education and Methods in Secondary Physical Education	
Field Experiences		
EDFN A695	Internship	9
Total Credits		35

* *Minimum grade of B required. With departmental approval, EDFN A478 may be taken before formal admission to the program. If EDFN A478 is taken as part of an undergraduate program, it may be waived for the program.*

Candidates must also successfully complete a comprehensive portfolio demonstrating that they have met all of the applicable standards and a content-specific comprehensive exam.

A total of 35 credits is required for the degree.

Professional Field Experiences

The secondary education program includes a comprehensive internship experience in an educational setting. Internship placements are arranged and supervised by university faculty in partnership with the principal and staff from the public school. University coursework and classroom practice are closely linked and communication about performance in both the coursework and classroom practice is shared among the partners.

Performance in the internship must meet stated competencies and individual outcomes. Performance evaluations determine the candidate's progress toward meeting the State of Alaska Standards for Beginning Teachers, the Alaska Standards for Culturally Responsive Schools, and the specialized professional associations.

It is expected that interns will demonstrate appropriate professional dispositions with respect to their actions, attitudes and performance. Teacher candidates are required to abide by the State of Alaska Code of Ethics of the Education Profession. Unacceptable academic performance, an unprofessional attitude, unsatisfactory field reports, violation of professional ethics or other factors may result in removal from the field experience and denial of the State-approved Program Verification Form for teacher certification.

Internship placements are made by the School of Education in partnership with participating school districts, which may request additional information and/or preparation from university candidates according to the district's established policies and practices. Because cooperating districts also determine the number of placements available for candidates, placement may become competitive if the number of applicants exceeds the number of spaces. Districts also reserve the right to refuse or terminate placements when candidates do not meet a minimum standard of performance. While the university will make every effort to identify appropriate field experiences, admission to the secondary program does not guarantee an internship placement. The university offers placements across the state of Alaska. Out-of-state placements will require additional approvals and are not guaranteed.

State-Approved Verification Form

To obtain a State-Approved Verification Form for teacher certification, candidates must have:

- Completed all program requirements and courses with a minimum grade of C, or B where specified.
- Maintained a cumulative 3.00 GPA in the secondary education certification program.
- Achieved passing scores on the Praxis Core Exam and Praxis Content Area Exam.
- Satisfactorily completed internship(s).
- Met all standards listed in the standards-based Initial Endorsement Content Preparation Review.

Alaska certification note: Certification is awarded by the State of Alaska through the Alaska EED in Juneau. Graduates must meet all requirements specified by EED at the time of application for certificate.

Program Student Learning Outcomes

Student outcomes for the program are based on the Alaska Beginning Teacher Standards (ABTS) (http://www.eed.state.ak.us/standards/pdf/beginning_teachers.pdf) and Alaska Standards for Culturally Responsive Schools (CS) (<http://www.ankn.uaf.edu/publications/standards.html>) and the specialized professional associations. Students graduating with a Master of Arts in Teaching will be able to:

- Demonstrate and examine how their educational philosophy affects their teaching in the classroom. (ABTS 1, CS I)
- Demonstrate application of learning theory, effective instructional planning and practice, and assessment processes for all students. (ABTS 2, 5, CS II, V)
- Demonstrate knowledge of the individual and cultural diversity in Alaskan communities and schools and apply that knowledge in educational practice. (ABTS 3, CS III)
- Demonstrate content and pedagogical knowledge in the endorsement area as specified by the appropriate Specialized Professional Association (SPA) - NCTM, NSTA, NCSS, NCTE, ACTFL, NASM, etc. (ABTS 4, CS IV)
- Demonstrate technological knowledge and proficiency to enhance instructional practice. (ABTS 5, CS V)
- Demonstrate an appropriate learning environment including effective classroom management. (ABTS 6, CS VI)
- Demonstrate participation in and contribution to the profession by maintaining high professional standards, including collaboration and communication (both oral and written), with all stakeholders in the university and school community. (ABTS 7, 8, CS III, VII, VIII)
- Complete the MAT program and receive an Institutional Recommendation for initial licensure. (ABTS 1-8, CS I-VIII)

Special Education

<https://www.uaa.alaska.edu/academics/school-of-education/>

Programs of Study

Master of Education

- MEd in Special Education (p. 386)

Graduate Certificate

- Certificate in Special Education (p. 387)

Master of Education in Special Education

The MEd in Special Education has two options:

- Special education concentration
- Special education administration concentration — *admission suspended*

The MEd in Special Education with a special education concentration is designed for individuals who desire advanced professional preparation in special education. The program encompasses theory, research and practice relating to individuals who experience disabilities.

The M.Ed. in Special Education provides candidates with the knowledge and application of assessment and intervention strategies that support the learning of children with exceptional learning for grades K-8 (Elementary) or 7-12 (Secondary), and aims to prepare scholarly practitioners grounded in purpose and research.

Admission Requirements

- Satisfy the Admission Requirements for Graduate Degrees (p. 50) and the School of Education M.Ed. Admission Requirements (p. 377).
- Submit an application to the M.Ed. in Special Education Program. Contact the Graduate Studies Department at (907) 786-4450.
- Submit proof of current teaching certification. (For those who do not hold an Alaska Teaching Certificate and would like to obtain one, please refer to the Graduate Certificate in Special Education (p. 387) program.)

The SOE allows access to coursework through a variety of methodologies and delivery formats, including distance education. Candidates must have the technological knowledge, skills, and access to engage in distance learning. The following courses are required for completion of the program.

Graduation Requirements

- Satisfy the General University Requirements for Graduate Degrees. (p. 346)
- Satisfy the School of Education M.Ed. Graduation Requirements (p. 377).
- Complete the program requirements below.
- Prior to graduation, students must also satisfactorily complete a Special Education Praxis II, related to the student's area of focus, and approved by their advisor.

Candidates admitted or seeking admission to the M.Ed. in Special Education must receive approval from their advisor prior to taking coursework from another institution intended to satisfy requirements for the program.

Program Requirements

Code	Title	Credits
Core Courses		
EDSE A610	Clinical Assessment: Eligibility and Program Planning	3
EDSE A612	Curriculum and Strategies I: Low Incidence	3
EDSE A622	Curriculum and Strategies II: High Incidence	3
EDSE A623	Language and Literacy: Best Practices in Assessment and Intervention	3

EDSE A624	Social/Emotional Development, Assessment, and Intervention	3
EDSE A625	Teaching Mathematics to Special Learners	3
EDSE A632	Special Education Law: Principles and Practices	3
Research Courses *		
EDRS A660	Fundamentals of Research in Education	3
Research Elective by Advisement *		3
Concentration		
Complete one of the following concentrations:		9
Elementary Special Education		
EDSE A674	Family Partnerships in Early Childhood Special Education	
EDSE A695E	Advanced Internship in Special Education: Elementary	
or EDSE A611Y & EDSE A623Y	Assessment in Preschool Special Education and Strategies and Interventions: Preschool Special Education	
Secondary Special Education		
EDSE A686	Transition Services for Secondary Students with Disabilities	
EDSE A695S	Advanced Internship in Special Education: Secondary	
or EDSE A633 & EDSY A661	Autism: Communication and Social Disorders and Assessment in Secondary Classrooms	
Total Credits		36

* EDRS A660 and research credits by advisement may be waived for candidates entering the program with a master's degree. Candidates admitted or seeking admission to the M.Ed. in Special Education must receive approval from their advisor prior to taking coursework from another institution intended to satisfy requirements for the master's degree.

A total of 36 credits is required for the degree.

Field Placements

Some courses in the special education program require field placements and/or internship placements. The School of Education does not guarantee placements as they are contingent on school district and agency partners. The university offers placements across the state of Alaska. Out-of-state placements will require additional approvals and are not guaranteed.

Program Student Learning Outcomes

Student outcomes for the program are based on the professional standards of the Council for Exceptional Children (CEC) located at www.cec.sped.org (<http://www.cec.sped.org>).

Students who complete this program will be able to:

- Utilize a variety of assessments to identify specific areas of student strengths and weaknesses and use the results to guide instruction.
- Individualize instruction to meet the specific needs of students with disabilities in inclusive settings.
- Support and promote inclusiveness and equity for students
- Apply the legal and ethical principles associated with special education.
- Promote a positive social environment for all students, particularly those with significant emotional and/or behavioral disorders.
- Develop and maintain an atmosphere of collaboration with teachers, parents, administrators, and paraprofessionals.
- Critically analyze and apply principles of research.
- Demonstrate literacy regarding theoretical perspectives associated with human development and learning.

Graduate Certificate in Special Education

The Graduate Certificate in Special Education is designed for individuals who want to become certificated special education teachers. This program expands teaching competencies by providing the theory, knowledge and practical experience in special education needed to serve children with disabilities and their families. Graduates of this program are eligible for an institutional recommendation for (a) an initial teaching certificate with a special education endorsement, or (b) a special education endorsement on an existing teaching certificate from the Alaska Department of Education and Early Development (EED). Students who are admitted to the Graduate Certificate in Special Education may apply to the MEd in Special Education. Courses applied to this certificate may also apply to the MEd in Special Education.

The Graduate Certificate in Special Education provides candidates with the knowledge of assessment and intervention strategies that support the learning of children with exceptional learning needs for grades K-8 (Elementary) or grades 7-12 (Secondary). A graduate certificate leads to Special Education Teacher Certification in the State of Alaska.

Admission Requirements

- Satisfy the Admission Requirements for Graduate Certificates (p. 50).
- Submit an application for the Graduate Certificate in Special Education Program. Contact the Graduate Studies Department at (907) 786-4450.

Applicants seeking initial teaching certification must complete the following prerequisite coursework.

Code	Title	Credits
Prerequisite Coursework		
Complete the following 15 credits of prerequisite courses with a minimum grade of B in each course. An advisor may waive one or more of the prerequisite courses if the applicant can demonstrate successful completion of an equivalent course taken at a regionally accredited institution within the consecutive seven-year period prior to graduation. Prerequisites must be successfully completed prior to beginning the graduate-level program requirements.		
EDFN A300	Philosophical and Social Context of American Education	3
or EDFN A304	Comparative Education	
EDFN A301	Foundations of Literacy and Language Development	3
or EDSE A483	Language and Literacy: Assessment and Interventions	
EDSE A212	Human Development and Learning	3
or PSY A365	Child and Adolescent Development	
EDSE A336	Classroom Guidance and Behavior Management	3
MATH A211	Mathematics for Elementary School Teachers I	3

Candidates must receive approval from their advisor prior to taking coursework from another institution intended to satisfy requirements for the graduate certificate.

The SOE allows access to coursework through a variety of methodologies and delivery formats, including distance education. Candidates must have the technological knowledge, skills and access to engage in distance learning.

Graduation Requirements

- Satisfy the General University Requirements for Graduate Certificates (p. 353).
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
Required Courses		
EDSE A610	Clinical Assessment: Eligibility and Program Planning	3
EDSE A612	Curriculum and Strategies I: Low Incidence	3
EDSE A622	Curriculum and Strategies II: High Incidence	3
EDSE A623	Language and Literacy: Best Practices in Assessment and Intervention	3
EDSE A625	Teaching Mathematics to Special Learners	3

EDSE A692	Internship Seminar in Special Education Teaching	1-2
Concentration		
Complete one of the following concentrations:		9
Elementary Education		
EDSE A674	Family Partnerships in Early Childhood Special Education	
EDSE A695E	Advanced Internship in Special Education: Elementary	
Secondary Education		
EDSE A686	Transition Services for Secondary Students with Disabilities	
EDSE A695S	Advanced Internship in Special Education: Secondary	
Total Credits		25-26

Field Placement

Some courses in the special education program require field placements and/or internship placements. The School of Education does not guarantee placements as they are contingent on school district and agency partners. The university offers placements across the state of Alaska. Out-of-state placements will require additional approvals and are not guaranteed.

Admission to Special Education Internship (Student Teaching Experience)

Candidate must fulfill the following prior to being placed into an internship.

- Criminal history background clearance is required before the internship. Background checks take up to five months to process, so they must be initiated well in advance of the semester in which the candidate enrolls in the internship.
- Submit an application form for admission to Special Education Internship by the deadline. Contact the School of Education Student Services office for fall and spring application deadlines at (907) 786-4401.
- Interview upon request.

State Approved Verification Form & Alaska Teacher Certification

Following are the requirements for a state-approved verification form for a special education certificate or endorsement.

- Completed all applicable prerequisite courses with a minimum grade of B.
- Completed all required courses with a minimum overall GPA of 3.00, with a minimum grade of C.
- Completed internships and a professional portfolio documenting attainment of Council for Exceptional Children (CEC) standards.
- Passed applicable examinations. Passing scores on the Praxis I, Praxis Core or other Alaska Department of Education and Early Development (AK-DEED) approved basic skills examination, and

the Praxis II are required. The specific PRAXIS II test number and score is established by AK-DEED.

Note Concerning Alaska Teaching Certification:

The state approved verification form for an initial certificate with a special education endorsement will be at the grade range of the internship (i.e., Elementary (K-8) or Secondary (7-12)). The state approved verification form for special education endorsement on an existing teaching certificate will be at the grade range of that certificate. DEED may have additional requirements for certification/endorsement.

Additional requirements for teaching certification within the state of Alaska can be found at the Alaska Department of Education and Early Development (<http://www.eed.state.ak.us>).

Program Student Learning Outcomes

Student outcomes for the Special Education Graduate Certificate program are based on the professional standards of the Council of Exceptional Children (CEC) located at www.cec.sped.org (<http://www.cec.sped.org>). Students who complete this program will be able to:

- Utilize a variety of assessments to identify specific areas of student strengths and weaknesses and use the results to guide instruction.
- Individualize instruction to meet the specific needs of students with disabilities in inclusive settings.
- Support and promote inclusiveness and equity for students.
- Apply the legal and ethical principles associated with special education.
- Promote a positive social environment for all students, particularly those with significant emotional and/or behavioral disorders.
- Develop and maintain an atmosphere of collaboration with teachers, parents, administrators, and paraprofessionals.
- Critically analyze and apply principles of research.
- Demonstrate literacy regarding theoretical perspectives associated with human development and learning.

Teaching and Learning

www.uaa.alaska.edu/academics/school-of-education/ (<https://www.uaa.alaska.edu/academics/school-of-education>)

Programs of Study

Master of Education

- MEd in Teaching and Learning (p. 389)

Graduate Certificate

- Certificate in Language Education (p. 390)

Master of Education in Teaching and Learning

The Master of Education in Teaching and Learning is designed for professionals seeking advanced studies in education. The program

offers a selection of courses appropriate for individuals committed to reflecting on, refining and enhancing professional practice. Culturally responsive education and applying that approach to the Alaska context is emphasized, particularly with respect to Alaska Native education. Programs will be planned with an advisor to allow concentrations in particular areas of interest (e.g., curriculum and teaching, early childhood, special education, teaching English language learners, leadership, and educational research). Content areas (e.g., sciences) or professional fields outside P-12 schools (e.g., academic advising in higher education) may be available through collaboration with colleges outside the School of Education.

Admission Requirements

- Satisfy the Admission Requirements for Graduate Degrees (p. 50) and the School of Education MEd Admission Requirements (p. 377).
- Complete the Department of Teaching and Learning application packet, including two letters of reference, an application essay and transcripts.
- Submit a resume documenting education or leadership experience and at least one year of appropriate professional experience.
- Participate in an interview if requested by the department.

Background Check Requirements

See School of Education Field Placements (p. 378).

Graduation Requirements

- Satisfy the General University Requirements for Graduate Degrees (p. 346).
- Satisfy the School of Education MEd Graduation Requirements (p. 377).
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
Teaching and Learning Core		
EDTL A651	Curriculum Theory and Design	3
EDTL A698	Teaching and Learning Research Project *	3
Complete one of the following:		3
EDFN A478	Issues in Alaska Native Education, K-12	
EDFN A621	Culture, Language and Literacy	
EDFN A631	Advanced Educational Psychology	
EDFN A636	Innovations in Teaching and Learning	
EDFN A654	Brain, Mind, and Education	
EDL A620	Leadership in Alaska Culture and Social Justice Issues	
EDTL A690	Selected Topics in Teaching and Learning	
Research		

EDRS A660	Fundamentals of Research in Education **	3
Complete two of the following:		6
EDFN A689	Action Research Experience: Culturally Sustaining Pedagogy for English Language Learners in P-6 Clas	
or EDRS A662	Action Research in Education	
EDRS A661	Data-Informed Instruction and Decision Making	
EDRS A663	Research Design	
EDRS A667	Program Evaluation Fundamentals	
EDRS A668	Qualitative Research in Education	

Professional Concentration		
In consultation with a faculty advisor, candidates select an approved area of concentration designed to enhance their professional expertise, then 12 credits of coursework that maintain thematic integrity in support of the professional concentration. Examples of concentrations include curriculum and teaching, early childhood, special education, teaching English language learners, leadership, and educational research. Content areas (e.g., sciences) or professional fields outside P-12 schools (e.g., academic advising in higher education) may be available through collaboration with colleges outside the School of Education.	12	
Total Credits		30

* The 3 required credits should be taken as follows: 1 credit at the beginning of program, 1 credit in the middle of program, and 1 credit at the end of program. Contact an advisor for more information.

** Course must be completed within the first 12 credits of program coursework.

Students must also complete a portfolio containing an applied research report and documenting personal learning outcomes and attainment of program outcomes.

A total of 30 credits is required for the degree.

Program Student Learning Outcomes

Students graduating with a Master of Education in Teaching and Learning will be able to:

- Demonstrate advanced content and pedagogical knowledge for teaching.
- Use research to inform professional practice.
- Explain the role of social justice in education and present knowledge, skills, and dispositions one needs to make change that supports social justice in education.
- Demonstrate leadership and facilitation skills for the professional context.
- Translate educational theories into culturally responsive practice.

Graduate Certificate in Language Education

The Graduate Certificate in Language Education is designed for individuals seeking advanced professional preparation to increase knowledge and skills in working with language learners in the P-6 setting. Those who teach languages in public or private settings, both in the United States and abroad, may enhance their knowledge and practice by completing this standards-based program.

English as a Second Language (ESL) and Culturally Sustaining Pedagogy Concentration

The ESL concentration is for candidates who are seeking one of the following:

1. Institutional Recommendation for an English as a Second Language (ESL) endorsement on a current teacher certificate or
2. Advanced preparation in ESL for increasing professional performance in community programs.

Admission Requirements

1. Satisfy the Admission Requirements for Graduate Certificates (p. 50).
2. Document professional background (must hold or be eligible to hold a teacher certificate from the State of Alaska.)
3. Provide a minimum of three letters of recommendation addressing the candidate’s potential for program success.
4. Submit a current resume.
5. Submit a writing sample including an educational goal statement directly related to the certification program.

Background Check Requirements

See School of Education Field Placements (p. 378).

Graduation Requirements

- Satisfy the General University Requirements for Graduate Certificates. (p. 353)
- Complete the program requirements below.

Program Requirements

This program includes courses delivered by distance. Admitted students must have the technological knowledge and skills to engage in distance learning.

Complete a minimum of 18 credits beyond the baccalaureate degree including:

Code	Title	Credits
EDFN A621	Culture, Language and Literacy	3
EDFN A645	Culturally Sustaining Literacy for P-6 English Language Learners	3
EDFN A646	Culturally Sustaining Instruction in Science, Technology Engineering, Arts and Mathematics (STEAM) f	3

EDFN A689	Action Research Experience: Culturally Sustaining Pedagogy for English Language Learners in P-6 Clas	1-6
EDFN A691	Current Topics in Second Language Education	3
EDSY A668	Teaching English as a Second Language in Secondary Schools	3
Total Credits		16-21

Meet the Teachers of English to Speakers of Other Languages (TESOL) Standards for ESL teachers. This may require students to take additional credits beyond the minimum of 18 required for a graduate certificate.

Maintain an overall GPA of 3.00 in the program with no more than one C in a required course.

As with all graduate certificates in the School of Education, coursework applied to the certificate may apply to the MEd with faculty advisor approval.

Institutional Recommendation

Following are the requirements for an institutional recommendation for an ESL endorsement:

1. Professional Teacher Certificate or equivalent.
2. Completion of all program requirements as indicated above.

Alaska Certification Note

The State of Alaska Department of Education and Early Development (EED) in Juneau awards endorsements. Graduates must meet all requirements specified by EED at the time of application for the endorsement.

Program Student Learning Outcomes

The student outcomes for this concentration are based on the Teachers of English to Speakers of Other Languages (TESOL), and World-Class Instructional Design and Assessment (WIDA) standards. More information about these standards may be found at www.tesol.org (<http://www.tesol.org>) and www.wida.us (<http://www.wida.us>). Students who complete the Graduate Certificate in Language Education with a concentration in English as a Second Language and Culturally Sustaining Pedagogy will:

- Demonstrate understanding of language as a system and demonstrate a high level of competence in helping language learners acquire and use the new language in speaking, reading and writing for social and academic purposes.
- Understand and apply concepts, theories, research and practice to facilitate the acquisition of a primary and a new language in and out of classroom settings.
- Know, understand and use the major concepts, principles, theories and research related to the nature and role of culture in language development and academic achievement that support an individual student's learning and apply this knowledge to improve teaching and learning.

- Know, understand and use knowledge of how cultural groups and students' cultural identities affect language learning and school achievement.
- Know, understand and apply concepts from research to plan instruction in a supportive learning environment for language learners.
- Understand various issues of measurement (e.g., equity; cultural and linguistic bias; and political, social, and psychological factors) in assessment, IQ and special education testing; the importance of standards; and the difference between language proficiency and other types of assessment.
- Serve as a professional advocate and resource for language learners and the community.

College of Engineering

www.uaa.alaska.edu/collegeofengineering

The College of Engineering offers graduate degrees in civil engineering, mechanical engineering, and project management. The two engineering degree programs require a baccalaureate degree in engineering for admission while the project management program requires a baccalaureate degree in engineering, science or equivalent areas. The graduate offerings of the College of Engineering are scheduled to accommodate evening students. As a result, the graduate programs normally require two or more years for completion. A project or thesis may be required as a part of each graduate program within the College of Engineering.

Applied Environmental Science and Technology

Engineering Building (ENGR), Room 201, (907) 786-1900

www.uaa.alaska.edu/collegeofengineering (<http://www.uaa.alaska.edu/collegeofengineering>)

The graduate program in applied environmental science and technology (AEST) is designed for students seeking careers as environmental professionals in the academic, regulatory, industrial, military or consulting sectors. The program is interdisciplinary in nature and encourages candidates to develop an understanding of environmental principles through advanced studies across biology, chemistry, geology, statistics, applied environmental science and technology, and environmental engineering.

This program offers two degree options and one graduate certificate option.

Applied Environmental Science and Technology (AEST) Degrees

The AEST master's degrees are designed for those students who wish to pursue specialized advanced study and original research. AEST is an excellent preparation for both the practicing professional and the future doctoral student.

Program Objectives

The objective of the AEST programs are to produce graduates who:

- Have an advanced technical knowledge of environmentally related disciplines within the life sciences, physical sciences, geosciences, mathematics and environmental engineering;
- Are capable of integrating advanced technical information from different science and engineering disciplines;
- Are capable of conceiving and conducting a research project (MS-AEST option only); and
- Are capable of working in a professional environment.

Programs of Study

Master of Applied Environmental Science and Technology

- Master of Applied Environmental Science and Technology (M-AEST) (p. 392)

Master of Science

- MS in Applied Environmental Science and Technology (MS-AEST) (p. 392)

Graduate Certificate

- Certificate in Environmental Regulations and Permitting (p. 392)

Faculty

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Aaron Dotson, Assistant Professor, addotson@alaska.edu

Rob Lang, Professor, rjlang@alaska.edu

John Olofsson, Professor, john.a.olofsson@gmail.com

Robert Reges, Adjunct Faculty, robert@reevesamodio.com

Master of Applied Environmental Science and Technology (M-AEST)

Admission to this program is currently suspended. Contact the College of Engineering for more information.

Master of Science in Applied Environmental Science and Technology (MS-AEST)

Admission to this program is currently suspended. Contact the College of Engineering for more information.

Graduate Certificate in Environmental Regulations and Permitting

Admission to this program is currently suspended. Contact the College of Engineering for more information.

Arctic Engineering

Engineering Building (ENGR), Room 201, (907) 786-1900

www.uaa.alaska.edu/civilengineering/arctic (<http://www.uaa.alaska.edu/civilengineering/arctic>)

The Arctic engineering program is designed to provide graduate education for engineers who must deal with the unique challenge of design, construction and operations in the cold regions of the world. The special problems created by the climactic, geological and logistical conditions of the Arctic and sub-Arctic require knowledge and techniques not usually covered in the normal engineering courses. Development of petroleum and other natural resources has accentuated the demand for engineers trained in northern operations, both from private industries involved in development and government agencies planning or regulating these activities. Of primary importance is a thorough knowledge of heat transfer processes and properties of frozen ground and frozen water, which are basic to most engineering activities in the Arctic. The areas of hydraulics, hydrology, materials and utility operations are also uniquely affected by Arctic considerations.

Program of Study

Master of Science

- MS in Arctic Engineering (p. 392)

Faculty

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Master of Science in Arctic Engineering

Admission to this program is currently suspended. Contact the College of Engineering for more information.

Civil Engineering

Engineering Building (ENGR), Room 201, (907) 786-1900

www.uaa.alaska.edu/civilengineering (<http://www.uaa.alaska.edu/civilengineering>)

The Master of Science in Civil Engineering (MSCE) is designed for students who wish to pursue research-oriented occupations or to eventually pursue a PhD degree, as well as to prepare for advanced professional engineering practice. The Master of Civil Engineering (MCE) is designed for students who wish to further emphasize engineering practice and prefer to substitute additional classroom education for graduate research experience.

Graduates of the Master of Science in Civil Engineering gain one year of education credit toward obtaining a Professional Engineer license in

Alaska. Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Objectives

The objectives of the UAA civil engineering graduate programs are to provide graduates with:

1. Advanced technical knowledge within one or more of the recognized sub-disciplines of civil engineering.
2. The ability to conceive and conduct an advanced research program.
3. The ability to effectively communicate research results.

Programs of Study

Master of Civil Engineering

- Master of Civil Engineering (MCE) (p. 393)

Master of Science

- MS in Civil Engineering (MSCE) (p. 393)

Faculty

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Master of Civil Engineering (MCE)

Admission to this program is currently suspended. Contact the College of Engineering for more information.

Master of Science in Civil Engineering (MSCE)

Admission Requirements

See Admission Requirements for Graduate Degrees (p. 50). All students must hold a baccalaureate degree in an engineering discipline or equivalent.

Graduation Requirements

1. Satisfy the General University Requirements for Graduate Degrees (p. 346).

2. Complete one of the following options, with approval in advance by the graduate advisor:

- Thesis Option: 30 credits of course work including satisfactorily completing thesis work, of which at least 6 credits will be CE A699
- Civil Engineering Project Option: 30 credits of coursework including satisfactorily completing a civil engineering project. At least 3 credits of the course work will be CE A686.
- Comprehensive Exam Option: 30 credits of coursework and a comprehensive exam to be administered in the final semester of study.

3. Complete the program requirements below.

Program Requirements

Students must complete coursework in the core competency areas of Arctic, environmental, geotechnical, structures, transportation, or water resources engineering and one course in mathematics at the 400-level or higher, all with a grade of B or better. Students electing to complete the Civil Engineering Project Option or the Comprehensive Exam Option must complete one 600-level course from the Engineering, Science and Project Management (ESPM) Department course offerings as part of their required course work. The remaining courses for any of the options shall be selected from any of the following emphasis areas or as approved by the student's graduate committee. Courses at the 400 level must be approved by the student's graduate committee.

Emphasis Areas

Students may choose to pursue a general MSCE degree. Alternatively, students may choose to pursue an MSCE degree with an emphasis area recognized on their transcript. Students will qualify for an MSCE degree with a sub-discipline emphasis by completing 15 credits of 600-level course work in one of the emphasis areas. Only one sub-discipline emphasis may be chosen for sub-discipline emphasis recognition. Graduate courses sorted by emphasis area are as follows:

Code	Title	Credits
Arctic		
AE A681	Frozen Ground Engineering	3
AE A682	Ice Engineering	3
AE A683	Arctic Hydrology and Hydraulic Engineering	3
AE A684	Arctic Utility Distribution	3
AE A685	Arctic Applications of Heat and Mass Transfer	3
AE A689	Cold Regions Pavement Design	3
Environmental		
AE A684	Arctic Utility Distribution	3
AEST A601	Aquatic Process Chemistry	3
CE A645	Chemical and Physical Water and Wastewater Treatment Processes	3
CE A646	Biological Treatment Processes	3
CE A647	Advanced Unit Processes	3
Geotechnical		
AE A681	Frozen Ground Engineering	3

AE A685	Arctic Applications of Heat and Mass Transfer	3
CE A610	Engineering Seismology	3
CE A611	Geotechnical Earthquake Engineering	3
CE A612	Advanced Foundation Design	3
CE A614	Soil Strength and Slope Stability	3
Structures		
AE A682	Ice Engineering	3
CE A631	Structural Finite Elements	3
CE A633	Structural Dynamics	3
CE A637	Earthquake Resistant Structural Design	3
CE A639	Loads on Structures	3
CE A651	Advanced Structural Analysis	3
CE A652	Advanced Steel Design	3
CE A654	Timber Design	3
Transportation		
AE A689	Cold Regions Pavement Design	3
CE A623	Traffic Engineering	3
CE A624	Pavement Design	3
CE A625	Highway Engineering	3
CE A626	Traffic Modeling and Simulation	3
CE A627	Advanced Traffic Flow Theory	3
Water Resources		
AE A683	Arctic Hydrology and Hydraulic Engineering	3
CE A662	Surface Water Dynamics	3
CE A663	Ground Water Dynamics	3
CE A674	Waves, Tides, and Ocean Processes for Engineers	3
CE A675	Design of Ports and Harbors	3
CE A676	Coastal Engineering	3
CE A677	Coastal Measurements and Analysis	3
CE A678	Design of Ocean Engineering Systems	3
CE A679	Sediment Transport and Coastal Processes	3

Thesis Option

The completed thesis must meet the following requirements:

1. The work must contribute to the body of knowledge in the candidate's field of graduate study. A literature review is required to show how the work is associated with the current state of the art in the candidate's field of graduate study.
2. The thesis should be of sufficient quality that it is publishable in a peer-reviewed journal, as judged by the graduate committee.
3. The work must demonstrate command of knowledge and skills associated with the candidate's field of graduate study.

4. The thesis proposal, submitted at least one semester prior to the thesis defense, must present evidence that the above requirements will be satisfied and will generally consist of an explicit problem statement, a literature review, and one or more sections describing the research and the analytical methods that will be applied.
5. The thesis must be defended by the student in an oral presentation to the student's graduate committee.

Civil Engineering Project Option

The civil engineering project will be conducted as individual study and includes the following items that the student submits to the advisory committee:

1. Project proposal to be approved by the graduate advisory committee.
2. Draft project report to be reviewed by the graduate advisory committee. The report should consist of an introduction, literature review, methodology (if applicable), results, conclusions, recommendations and references.
3. Final project report incorporating suggestions and improvements as prescribed by the graduate advisory committee.

Comprehensive Exam Option

The comprehensive exam shall be taken in the last semester of the degree program. Prior to the exam, the student and the student's advisor will review the coursework completed by the student as part of the Graduate Studies Plan. Aspects of that review will be used to create an exam based on four of the courses completed during the program. The final decision on which courses are to be used for the exam will be made by the advisor.

The Student and advisor will establish a period of time over which the exam will be taken. Additional requirements for the exam will be articulated to the student prior to the exam date.

Program Student Learning Outcomes

In keeping with the program objectives, the expected student learning outcomes of the UAA MSCE program include:

- An ability to use advanced methods of analysis,
- An ability to understand advanced civil engineering theory,
- An ability to conduct advanced civil engineering research,
- An ability to apply advanced engineering theory to the design of civil engineering systems, and
- An ability to work effectively within the management framework of organizations responsible for the practice of engineering.

Engineering Management and Science Management

University Center (UC), Suite 155, (907) 786-1924

www.uaa.alaska.edu/collegeofengineering/programs/esm (<http://www.uaa.alaska.edu/collegeofengineering/programs/esm>)

The engineering management and science management curriculum is designed for graduate engineers and scientists who will hold executive

or managerial positions in engineering, construction, industrial or governmental organizations as well as develop technology-based enterprises. It includes systems design, human relations of decision making, and financial, economic, quantitative, technical and legal subjects useful for solving management problems.

Programs of Study

Master of Science

- MS in Engineering Management (p. 395)
- MS in Science Management (p. 395)

Faculty

Roger Hull, Assistant Professor, rknull@alaska.edu

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Hsueh-Ming Steve Wang, Associate Professor, hswang@alaska.edu

Master of Science in Engineering Management

Admission to this program is currently suspended. Contact the College of Engineering for more information.

Master of Science in Science Management

Admission to this program is currently suspended. Contact the College of Engineering for more information.

Mechanical Engineering

Engineering Building (ENGR), Room 201, (907) 786-1900
www.uaa.alaska.edu/collegeofengineering (<http://www.uaa.alaska.edu/collegeofengineering>)

Graduate study in mechanical engineering prepares students for work that requires a greater degree of autonomy and mastery. A master's degree in mechanical engineering implies not only an enhanced level of understanding of the fundamentals of mechanical engineering, but also a skill set that includes original thinking and an ability to apply advanced concepts of mechanical engineering to problem solving.

The Master of Science in Mechanical Engineering (MSME) has a thesis and a non-thesis option. The thesis option includes a focus on skills related to the acquisition of new knowledge and is designed for students who wish to pursue research-oriented occupations or to eventually pursue a PhD degree, as well as to prepare for advanced professional engineering practice. The non-thesis option is designed for students who wish to further emphasize engineering practice and prefer to substitute additional classroom education and a comprehensive written exam or a project and comprehensive oral exam for graduate research experience.

Program Objectives

The UAA mechanical engineering graduate program objectives are to provide graduates with:

1. Graduate-level technical knowledge within mechanical engineering.
2. An ability to conceive and conduct graduate-level engineering research and problem solving.
3. An ability to effectively communicate graduate-level engineering concepts and applications.

Fast Track MSME Option

The Mechanical Engineering Department offers the Fast Track MSME Option to current UAA Bachelor of Science in Mechanical Engineering (BSME) students interested in pursuing an MSME degree. Students admitted to the Fast Track MSME Option are allowed to count up to nine (9) credits of coursework towards both the BSME and MSME Graduation Requirements, the equivalent of one (1) semester of full-time graduate student enrollment. Students should be admitted to the Fast Track MSME Option and establish an approved Graduate Study Plan (GSP) before the first semester of the BSME Program senior year and before Fast Track MSME Option coursework commences. Students will be granted a BSME degree upon completion of the BSME Graduation Requirements and an MSME degree upon completion of the MSME Graduation Requirements.

Program of Study

Master of Science

- MS in Mechanical Engineering (p. 395)

Master of Science in Mechanical Engineering

Admission Requirements

Satisfy the Admission Requirements for Graduate Degrees (p. 50).

All students must hold a baccalaureate degree in an engineering or closely related discipline and submit to the UAA Office of Admissions:

1. Graduate Record Examination (GRE) results, taken within five years prior to the application date.
2. Three letters of recommendation from professors or other professionals particularly qualified to attest to the applicant's qualifications for graduate study.
3. A resume or curriculum vitae.
4. A one-page personal statement discussing the applicant's credentials and readiness for graduate studies. This is an opportunity for the applicant to share relevant information, qualifications and experience that would not be included with the UAA graduate application form or reflected on official transcripts. It is also the applicant's opportunity to describe his or her desire and commitment to pursue graduate study in mechanical engineering.

Current UAA baccalaureate students enrolled in engineering or a closely related discipline at the conclusion of their junior year may apply and be admitted to the MSME program. Students must complete their baccalaureate degree requirements before receiving the MSME.

Admission Requirements, Fast Track MSME Option

BSME students interested in pursuing an MSME degree are encouraged to discuss the Fast Track MSME Option with their academic advisor(s) and plan on applying for Fast Track MSME Option admission during their junior year. In addition to the Admission Requirements listed above (excluding the GRE requirement), the Fast Track MSME Option applicant must:

1. Be a current student enrolled in the UAA BSME Program.
2. Have completed 60% of the credits toward the BSME Program Requirements.
3. Have a grade point average (GPA) of 3.25 or higher for all coursework completed at UAA.
4. Have completed at least 24 course credits at UAA.

Graduation Requirements, Thesis Option

- Satisfy the General University Requirements for Graduate Degrees. (p. 346)
- Complete the program requirements below.
- Complete the thesis work approved in advance by the student's graduate committee.

Program Requirements

Code	Title	Credits
Complete 12 credits from the following:		12
EE/ME A471	Automatic Control	
ME A608	Mechanical Vibrations	
ME A610	Biomechanics	
ME A615	Composite Materials	
ME A621	Engineering Finite Element Analysis	
ME A630	Advanced Mechanics of Materials	
ME A642	Advanced Fluid Mechanics	
ME A651	Aerodynamics	
ME A653	Renewable Energy Systems Engineering	
ME A655	HVAC Systems Optimization	
ME A659	Fracture Mechanics	
ME A660	Turbomachinery	
ME A664	Corrosion Processes and Engineering	
ME A672	Advanced Linear Systems	
Complete 12 credits of elective courses* (6 credits of 400- or 600-level mathematics or statistics courses are strongly encouraged).		12
*Students admitted to the Fast Track MSME Option may apply up to nine (9) credits from the BSME.		
Complete 6 credits of thesis coursework:		6

ME A699 Thesis

Total Credits 30

Candidacy Requirements

To advance to candidacy, the student must complete:

- All UAA requirements for Advancement to Candidacy (p. 346).
- At least 9 credits of coursework from the approved GSP.
- A written thesis proposal, submitted to the student's graduate committee at least one semester prior to the thesis defense, presenting evidence that the thesis requirements will be satisfied. The proposal will consist of an explicit problem statement, a literature review, and one or more sections describing the research and analytical methods that will be applied. The proposal is subject to approval by the student's graduate committee following an oral presentation scheduled no sooner than two weeks after submission of the written proposal.

Thesis Requirements

The completed thesis must:

- Describe how the work is associated with the current state of the art in the candidate's graduate field of study.
- Contribute to the body of knowledge in the candidate's field of graduate study.
- Be publishable in either peer-reviewed technical conference proceedings or a peer-reviewed journal as judged by the candidate's graduate committee.
- Demonstrate command of knowledge and skills associated with the candidate's program of graduate study.
- Be defended by the student in an oral presentation to the candidate's graduate committee.

A total of 30 credits is required for the degree.

Graduation Requirements, Non-thesis Option

- Satisfy the General University Requirements for Graduate Degrees (p. 346).
- Complete the program requirements, and complete one of the following:
 - A comprehensive written examination set by the student's graduate committee.
 - A project fulfilling the project requirements below and a comprehensive oral exam set by the student's graduate committee.

Program Requirements

Code	Title	Credits
Complete 15 credits from the following:		15
EE/ME A471	Automatic Control	
ME A608	Mechanical Vibrations	
ME A610	Biomechanics	
ME A615	Composite Materials	

ME A621	Engineering Finite Element Analysis
ME A630	Advanced Mechanics of Materials
ME A642	Advanced Fluid Mechanics
ME A651	Aerodynamics
ME A653	Renewable Energy Systems Engineering
ME A655	HVAC Systems Optimization
ME A659	Fracture Mechanics
ME A660	Turbomachinery
ME A664	Corrosion Processes and Engineering
ME A672	Advanced Linear Systems
Complete the following course:	
PM A601	Project Management Fundamentals
Choose one of the following:	
Complete 15 credits of elective coursework*	
Complete 12 credits of elective coursework* and 3 credits of ME A686	
*Students admitted to the Fast Track MSME Option may apply up to nine (9) credits from the BSME.	
Total Credits	30

Project Requirements

The project must solve a practical engineering problem to the extent that original developments by the student are evident in the project report.

- The project problem and solution must be explained in the context of the current state of the art by means of a thorough review of pertinent literature.
- The project must include advanced technical components directly involving modern practice of mechanical engineering.
- The project must have sufficient scope to clearly demonstrate the student's advanced technical expertise in mechanical engineering.
- The project report must demonstrate command of knowledge and skills directly associated with the student's graduate program of study.
- The written project report, in the judgment of the student's graduate committee, must be publishable in the proceedings of a mechanical engineering specialty conference.
- The project proposal, submitted prior to enrolling in ME A686, must present evidence that the above requirements will be satisfied and will generally consist of an explicit problem statement, a literature review, and one or more sections describing the information and analytical methods to be applied.
- The project is to be orally presented to the student's graduate committee.

A total of 33 credits is required for the degree.

Licensure and/or Certification

Graduates of the Master of Science in Mechanical Engineering gain one year of education credit toward obtaining a Professional Engineer license in Alaska.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Student Learning Outcomes

In keeping with the program objectives, the expected student learning outcomes of the UAA MSME program include an ability to:

- Use in-depth methods of analysis.
- Demonstrate graduate-level mechanical engineering theory.
- Conduct advanced mechanical engineering research and applications.
- Apply graduate-level engineering theory to the design of mechanical engineering systems.
- Work effectively within the professional framework of organizations responsible for the practice of engineering.

Project Management

University Center (UC), Room 155, (907) 786-1924

www.uaa.alaska.edu/schoolofengineering/programs/pm (<http://www.uaa.alaska.edu/schoolofengineering/programs/pm>)

The Master of Science in Project Management (MSPM) is designed to provide a rigorous background in contemporary theory and practice in project management, strengthened through the extensive application of tools, concepts and critical thinking in a case study environment. The MSPM provides students with perspectives and skills to prepare them for increasingly significant and complex project leadership roles within a broad range of public and private sector organizations: engineering, construction, oil and gas, natural resources, health care, information technology, communications, utilities, education, financial services, government, military, transportation, and others.

The MSPM program is accredited by the Project Management Institute Global Accreditation Center. The structure and content of the curriculum is designed to enable students to learn, apply and demonstrate mastery of project management theory and practice in the context of hands-on project case studies managed and integrated progressively over the end-to-end project lifecycle as well as electives that provide opportunities for advanced study and application of project management in targeted industry sectors. Additionally, students will develop and strengthen leadership, communication, teamwork and professional responsibility traits necessary to lead and manage successful projects in a complex, global environment. The MSPM program requires a research or project oriented capstone.

The program serves full- and part-time students. Classes are generally held during the evening and selectively on weekends. The program provides a unique, real-time distance educational environment where students from across the state and around the world can join local

students and faculty in the live classroom environment. This approach also accommodates students who may need to travel regularly for their employment.

Program of Study

Master of Science

- MS in Project Management (p. 398)

Faculty

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Seong Dae Kim, Associate Professor, sdkim2@alaska.edu

LuAnn Piccard, Assistant Professor and ESPM Interim Director, lpiccard2@alaska.edu

Master of Science in Project Management

Professional Program Fee

A professional program fee is required of all students taking MS PM program courses in addition to published graduate tuition fees, course material fees, general support and student activity fees. The professional program fee is assessed for each course at a sum equal to the current level of resident graduate level tuition. Therefore, this fee is applied to either resident or non-resident tuition equally and is charged upon enrollment in PM courses. The fee contributes directly to program support.

Licensure and/or Certification

Graduates of the Master of Science in Project Management meet the educational hours required to sit through the Project Management Profession (PMP) or Certified Associate in Project Management (CAPM) certification.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Admission Requirements

Satisfy the Admissions Requirements for Graduate Degrees (p. 50).

Provisional/Conditional Admission

Provisional/conditional admission to the MS PM program is offered to applicants who provide sufficient evidence that they meet the requirements for study at an advanced level. Applicants must meet the minimum UAA admissions requirements. In addition, an entering master's degree student will have:

- Earned at least a bachelor's degree in engineering, science or equivalent areas (or as agreed to by the program chair).
- A grade of 3.00 (B) or higher in an undergraduate or equivalent research methods course and a statistics course that covers descriptive and inferential statistics. ESM A620 may be taken in lieu of the statistics requirement.

- Completed a minimum of two years of appropriate project management experience as shown by the applicant's resume.
- Obtained three letters of recommendation from professors or former or current employers or supervisors who are familiar with the candidate's work experience.
- Provided a statement of professional career objectives related to the study of project management.

All provisions stipulated on the Graduate Admission Recommendation Form (GARF) associated with a student's admission to the MS PM program must be completed within the time frame stipulated -- not to exceed one year for a full-time student, and not to exceed two years for a part-time graduate student. Failure to satisfy provisions will result in a formal departmental review and potential removal from the program.

Full Admission

Full admission to the MS PM program is offered to students who have:

- Previously been admitted in to provisional/conditional admission status and satisfied the specified requirements stated in the GARF.
- Completed the first 9 credits of the core PM classes (PM A601, PM A602, and PM A603 or PM A604) with a minimum grade of B in each. This completes phase gate 1 (see below).
- Undergone departmental review at completion of phase gate 1 and have been judged to have made satisfactory progress, met performance standards and demonstrated aptitude in project management by the MS PM Admissions Committee.

Additional Requirements

Enrolled students must have access to a computer and, if participating in a class remotely, an Internet connection speed the department finds acceptable. All students are expected to have basic computer and keyboarding skills prior to entry into the program, for example:

- Word processing (preferably Microsoft Word), presentation software (preferably Microsoft PowerPoint) and spreadsheet software (preferably Microsoft Excel).
- Sending and receiving e-mail with attachments.
- Accessing and navigating the Internet/World Wide Web.
- Understanding how to use basic computer file formats, software and peripheral hardware.

Remote (distance) students, defined as those living and/or participating outside the Municipality of Anchorage, are additionally responsible for:

- Any incremental, individual long-distance or high-speed Internet connection costs (refer to the department webpage (<http://www.uaa.alaska.edu/collegeofengineering/programs/pm>) for details).
- Any additional hardware (such as webcams, headsets, etc.) necessary to facilitate class participation.
- Contacting the distance learning coordinator before classes start to set up and arrange for distance delivery.

Academic Requirements

Students enrolled in the MS PM program must:

- Must receive a 3.00 (B) or better in all core classes.
- Receive no more than one 2.00 (C) grade in any elective course.

As a prerequisite for PM A686A registration, students must have achieved the GPA requirements established as program expectations above. The faculty reserves the right, where warranted by evaluation of a student's progress and apparent knowledge, to require additional coursework or other preparation to ensure the degree candidate possesses adequate professional skills and capabilities. This includes the ability to reason and communicate both effectively and quantitatively, orally and in writing.

Noncompliance with academic progress expectations will result in probation and possible dismissal from the program. See Academic Standing in the Graduate Degree Policies (p. 349) for more information.

Course Delivery

Students in the MS PM program can attend courses in the classroom and/or by state-of-the-art, real-time video capabilities. This format allows students from across the state and around the world to join local students and faculty in real time, in the classroom as an active course participant using readily available, off-the-shelf technology. This real-time capability also enables students who must travel during the semester to join the class via ad hoc connections from wherever they may be located (connection speed permitting). Additionally, all class sessions are recorded and posted to the UAA learning management system after the class session is completed so that students can review the material in the event that a class session is missed. This approach provides flexibility for students to begin and complete the program from wherever their work assignments or personal situations may take them.

Graduation Requirements

- Satisfy the General University Requirements for Graduate Degrees (p. 346).
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
Core Requirements		
PM Overview:		
PM A601	Project Management Fundamentals	3
PM A602	Application of Project Management Processes	3
PM Process Series:		
PM A603	Project Initiation and Planning	3
PM A604	Project Executing, Monitoring and Control	3
PM A605	Operational Integration and Project Closure	3

Capstone Project Demonstration of PM Mastery:

PM A686A	Capstone Project: Initiating and Planning	3
PM A686B	Capstone Project: Executing, Controlling and Closing	3
Electives		
Complete an additional 12 credits of PM courses as electives *		12
Total Credits		33

* A student may petition for a single elective 3-credit graduate-level course from outside the program.

Departmental Review/Phase Gates

1. Phase gate 1 (after completion of PM A601, PM A602, and either PM A603 or PM A604): Students will be admitted provisionally/conditionally to the program until this phase gate has been successfully completed. Phase gates are established in order to evaluate a student's progress, performance and their demonstrated potential to be a successful project manager.
2. Phase gate 2 (after completion of PM A686A): Students must receive departmental approval prior to enrollment in PM A686B after the successful completion of an advisory committee-approved project management plan and Institutional Review Board review (as appropriate) accomplished in PM A686A.

Local classroom and/or real-time distance participation is required.

Capstone Project

Three credits of PM A686A and 3 credits of PM A686B, taken over two semesters, are required for the degree.

All capstone project work must meet the following requirements:

- The work must contribute to the body of knowledge in the student's graduate field of study.
- A literature search is required to demonstrate how the work is associated with the current state of the art in the student's graduate field of study.
- The final capstone project report, as judged by the student's graduate advisory committee, must be of sufficient quality to justify publication in either a peer-reviewed technical conference proceeding or a peer-reviewed journal. Publication of a manuscript in a journal or conference paper is not a requirement for graduation, but submissions are encouraged.
- The work must demonstrate command of knowledge and skills associated with the student's graduate program of study.
- The project must have sufficient scope to clearly demonstrate the student's advanced expertise in and mastery of project management.
- The work must require a level of effort consistent with 6 graduate-level credit hours.
- The student must satisfactorily present their capstone project and be evaluated by a panel of faculty and project management practitioners.

A total of 33 credits is required for the degree.

Program Student Learning Outcomes

Student learning outcomes are based on the professional best practices of the Project Management Institute (PMI) Global Accreditation Center (GAC) standards and guidelines, and UAA paradigms. Students who successfully complete this program will:

1. Demonstrate the capability to successfully manage projects across a broad range of scale, complexity, scope, environments and inherent risks.
2. Demonstrate the ability to employ the full range of project management tools and techniques to best satisfy industry and agency stakeholder requirements.
3. Conduct research that significantly contributes to and expands the diverse project management body of knowledge and produces a final project and product that demonstrates academic and project management success.
4. Demonstrate the ability to plan and execute project management activities across a broad range of industry sectors and organizations, and to employ the appropriate project management tools and techniques across a wide spectrum of project types, technologies and requirements.
5. Have the skills to determine the needs and balance the interests of project stakeholders in any organizational context and within cross-cultural business environments.
6. Demonstrate effective project team leadership and team development throughout the project management life cycle.
7. Effectively apply the principles of scope management, risk management, cost planning and control, quality planning and management, resource allocation and management, time management and project scheduling, and change management in the project environment.
8. Demonstrate a facility for comprehensive and objective analysis, structured decision-making, process optimization, and problem solving in the project management environment.
9. Understand and apply the principles of cost-benefit analysis, strategic alignment, project portfolio management and project performance analysis and metrics.
10. Understand and apply project planning and execution optimization and control in the context of the triple constraint; project scope, schedule, and budget.
11. Act with integrity and fairness in an ethical manner, understanding and demonstrating adherence to the principles of the Project Management Code of Ethics and Professional Conduct (<http://www.pmi.org/about/ethics/code>).
12. Demonstrate effective project management communications and problem-solving techniques related to project team management, project status reporting, conflict management and project stakeholder management.

College of Health

www.uaa.alaska.edu/collegeofhealth (<http://www.uaa.alaska.edu/collegeofhealth>)

Dietetics and Nutrition

Professional Studies Building (PSB), Room 146, (907) 786-1276
www.uaa.alaska.edu/alliedhealth/academics (<http://www.uaa.alaska.edu/alliedhealth/academics>)

Program of Study

Graduate Certificate

- Certificate in Dietetic Internship (p. 400)

Master of Science

- MS in Dietetics and Nutrition (p. 401)

Faculty

Carrie King, Associate Professor, cdking@alaska.edu
Kendra Sticka, Associate Professor, kdsticka@alaska.edu
Amanda Walch, Term Assistant Professor, akwalch@alaska.edu

Graduate Certificate in Dietetic Internship

The UAA Graduate Certificate in Dietetic Internship with a concentration emphasis on Alaska Native culture and Alaska health care delivery systems, developmentally accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND), offers the supervised practice experience required by the Academy of Nutrition and Dietetics to sit for the registered dietitian nutritionist (RDN) examination. The UAA dietetic internship offers unique experiences as it places emphasis on awareness of the cultural diversities of Alaska and how they affect the practice of dietetics.

The UAA dietetic internship is a highly competitive, full-time, 40-hour-per-week program. The program begins in the fall semester and runs mid-August through late April. The students take a total of 15 graduate credit hours through attending a weekly seminar at UAA and by completing their supervised practicum experience at rotation sites in Anchorage and surrounding communities.

Admission Requirements

Satisfy the Admission Requirements for Graduate Certificates (p. 50).

Departmental Admission Requirements

The application process adheres to the deadlines and procedures outlined by the American Dietetic Association. For the current year deadlines see the program website (<http://www.uaa.alaska.edu/culinary/academics/dietetic-internship>).

1. Baccalaureate degree (minimum) in dietetics or foods and nutrition.
2. Didactic program in dietetics verification statement within the past five years. Fulfill remedial education requirements (available upon request) if no coursework or work experiences in dietetics in five years prior to program admission.
3. Evidence of ability and willingness to work productively (prior work or volunteer experience).

4. Current resume and three letters of recommendation (one must be from an employer and one must be from a professor or academic advisor).
5. Participation in the D & D Digital Systems matching process for dietetic internships (<https://www.dnndigital.com/ada>).
6. Provide documentation of all necessary immunizations required to work in hospitals and other health care facilities.
7. Provide documentation of all necessary security background checks to meet state and federal requirements.
8. Provide documentation of necessary insurance coverage required to work in hospitals and health care facilities.

Acceptance into the program may become competitive if the number of applicants exceeds the number of intern spaces available. This program currently accepts four to five interns each academic year.

Graduation Requirements

- Satisfy the General University Requirements for Graduate Certificates. (p. 353)
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
DN A692A	Seminar: Current Issues in Dietetics Clinical and Community Nutrition	2
DN A692B	Seminar: Current Issues in Dietetics Community Nutrition and Foodservice Administration	1
DN A695C	Practicum in Clinical Nutrition	4
DN A695D	Practicum in Community Nutrition	2
DN A695E	Advanced Practicum in Community Nutrition	2
DN A695F	Practicum in Foodservice Administration	4
Total Credits		15

A total of 15 credits is required for this certificate.

Program Student Learning Outcomes

Upon completion of this program the graduate will be able to:

- integrate scientific information and research into practice. *[Scientific and evidence basis of practice]*
- display beliefs, values, attitudes and behaviors that are at the professional dietitian level of practice. *[Professional practice expectations]*
- provide clinical and customer services by developing and delivering information, products and services to individuals, groups and populations. *[Clinical and customer service]*

- utilize strategic application of principles of management and systems in the provision of services to individuals and organizations. *[Practice management and use of resources]*
- demonstrate an understanding of Alaska Native culture and Alaska's unique healthcare delivery system. *[Concentration area: Alaska Native culture and Alaska's unique healthcare delivery system]*

Master of Science in Dietetics and Nutrition

Registered dietitian nutritionists (RDNs) are trained dietetics and nutrition professionals who have met the strict educational and experiential standards set forth by the Commission on Dietetic Registration and the Accreditation Council for Education in Nutrition and Dietetics of the Academy of Nutrition and Dietetics. RDNs work in a wide variety of settings, including health care, business and industry, community/public health, education, research, government agencies and private practice. In order to be successful in their field, RDNs need a strong science foundation including courses in food and nutrition sciences, biochemistry, physiology, microbiology, anatomy, chemistry, foodservice systems, business, medical nutrition therapy, behavioral social sciences and communication.

Unique experiences are provided as the program places an emphasis on preparing advanced generalist RDNs for the cultural diversities and practice environments in Alaska.

The Dietetics and Nutrition (DN) didactic courses are delivered primarily online to facilitate access to the MS in Dietetics and Nutrition degree statewide. There will be a minimal (a maximum of one week per semester) face-to-face, Anchorage-based meeting requirement in some courses. Supervised practice (practicum) course (DN A695C, DN A695D, DN A695E, DN A695F) rotation sites are located throughout the state of Alaska. Most supervised practice rotations are located in health care settings.

Expenses beyond tuition generally include, but are not limited to, travel and housing in Anchorage for face-to-face course requirements (up to one week in Anchorage in the fall and spring semesters), travel and housing for supervised practice (practicum) rotations, activity fees, lab fees, student organization membership, immunizations, fingerprinting and criminal background checks, cost of Serv Safe certification and food/supplies for some DN courses.

The mission of the UAA Master of Science (MS) in Dietetics and Nutrition is to guide and advance the practice of dietetics and nutrition in Alaska.

Two tracks are offered in the MS in Dietetics and Nutrition.

1. Combined Master's Degree and Dietetic Internship Track: This track is for students seeking to complete the coursework and supervised practice requirements for entry-level practice as a RDN. The locations for completing the required dietetic internship rotations may include Anchorage, Fairbanks, Kodiak, Kenai, Soldotna, Sitka, Juneau, Bethel, Palmer, Wasilla, Kotzebue, Nome and Barrow. Graduates of the Combined Master's Degree and

Dietetic Internship track are eligible to sit for the Commission on Dietetic Registration national certification examination.

2. **Master's Degree Track:** This track is for students who are already credentialed as a RDN through the Commission on Dietetic Registration and are seeking additional study in dietetics and nutrition.

Admission Requirements

Satisfy the Admission Requirements for Graduate Degrees (p. 50).

Departmental Admission Requirements

- There is a competitive application process for admissions to the MS in Dietetics and Nutrition.
- See the Dietetics and Nutrition Program website (<https://www.uaa.alaska.edu/academics/college-of-health/departments/school-of-allied-health/academics/dietetics-nutrition/index.cshtml>) for information on the application submission process.
- The annual deadlines for each program track are:
 - Combined Master's Degree and Dietetic Internship track: **November 1**
 - Master's Degree track: **April 1**

For both program tracks:

1. Letter of application, addressing the following items:
 - a. Significant professional or volunteer responsibilities you have held,
 - b. Professional goals and reasons for desiring to enroll in this program,
 - c. Strengths that will help you succeed in this program and in reaching your professional goals,
 - d. Personal interests in research, and dietetics and nutrition,
 - i. Research is required for all students in this program, either through a graduate project or thesis.
 - e. The top two choices of DN faculty member you would most like to work with for academic advising. See Appendix A for a listing of faculty research and professional interests.
 - f. Provide any previous names your application materials may be submitted under.
2. Current resume or CV, including documentation of the following:
 - a. Paid work experience(s)
 - b. Volunteer or community service experience(s)
 - c. Professional organization membership(s)
3. Two letters of recommendation that meet the following criteria:
 - a. Use the template from the program website.
 - b. Are written by individuals who are qualified to address your professional, volunteer or academic experience and abilities.
 - i. Non-personal reference (i.e., not a family friend) and non-UAA DN faculty.
 - c. Address prior academic, work or volunteer experience, with evidence of ability and willingness to work productively.
4. A video interview presentation is required. See the DN program website (<https://www.uaa.alaska.edu/academics/college-of-health/>

[departments/school-of-allied-health/academics/dietetics-nutrition/index.cshtml](https://www.uaa.alaska.edu/academics/college-of-health/departments/school-of-allied-health/academics/dietetics-nutrition/index.cshtml)) for the requirements for the presentation.

5. Application to UAA graduate school.
6. Upon successful admission, prior to starting coursework, an advising meeting with the DN graduate program director (in person or by phone) is required.
7. Additional requirements for the Master's Degree Track only:
 - a. Copy of current RD/RDN credential from the Commission on Dietetic Registration.
8. Additional requirements for the Combined Master's Degree and Dietetic Internship Track only:
 - a. Didactic Program Verification Statement within the past five years. For more information about verification statements see the Academy of Nutrition and Dietetics website (<http://www.eatrightpro.org/resource/acend/program-directors/program-directors-faqs/faqs-about-verification-statements>).
 - b. Completion of current education requirements, as determined by the DN graduate program director, if no coursework or work experiences in dietetics in the five years prior to program admission. Generally, a current course, completed with a minimum grade of a "C", in each of the following will be required before admission to the program: medical nutrition therapy, community nutrition and foodservice management. If a medical nutrition therapy course is offered as a two or three part course (i.e. MNT I and MNT II), all parts will be required. Courses completed by distance education from accredited institutions will be accepted.
 - c. UAA Dietetic Internship application for admission (found on the DN program website (<https://www.uaa.alaska.edu/academics/college-of-health/departments/school-of-allied-health/academics/dietetics-nutrition/index.cshtml>)). Applicants will also be asked to rank their preferences for the required internship rotation locations.
 - d. Upon successful admission to the DN graduate program, prior to starting coursework, documentation of the following items are required:
 - i. All necessary immunizations required to work in hospitals and other health care facilities,
 - ii. All necessary security background checks to meet state and federal requirements,
 - iii. Necessary professional and health insurance coverage required to work in hospitals and health care facilities.

Advising

1. Call the Dietetics and Nutrition Program at (907) 786-1276 for an appointment with a dietetics and nutrition program advisor to plan a personal program of study.
2. All students in the MS Dietetics and Nutrition program are required to participate in a dietetics advising session a minimum of one time per semester.

Academic Requirements

Students must earn a satisfactory grade (B or P grade) and maintain a cumulative GPA of 3.0 for all required courses.

Transfer Credits

Up to 9 semester credits from a graduate program or dietetic internship accredited by the Accreditation Council for Education in Nutrition and Dietetics may be transferred to UAA and counted toward degree completion. Quarter credits will be converted to semester credits by multiplying quarter credits by two-thirds.

Graduation Requirements

- Satisfy the General University Requirements for Graduate Degrees (<https://catalog.uaa.alaska.edu/graduateprograms/degree requirements>).
- Complete all required academic coursework specified on the graduate studies plan, with a minimum of a B or P grade.
- Complete all of the program requirements below.

Program Requirements

Core Courses:

Code	Title	Credits
DN A615	Public Health Nutrition	3
DN A630	Applied Research in Nutrition and Dietetics	3
DN A641	Clinical Nutrition Assessment and Intervention	4
DN A642	Advanced Clinical Nutrition	4
DN A650	The Business of Dietetics	3
DN A698	Dietetics & Nutrition Graduate Project	3-6
or DN A699	Dietetics & Nutrition Graduate Thesis	
NSG A633	Statistics for Advanced Practice	3
Total Credits		23-26

Complete one of the following options:

1. Combined Master's Degree and Dietetic Internship Track

Code	Title	Credits
DN A601	Professional Practice in Dietetics and Nutrition	2
DN A692A	Seminar: Current Issues in Dietetics Clinical and Community Nutrition	2
DN A692B	Seminar: Current Issues in Dietetics Community Nutrition and Foodservice Administration	1
DN A695C	Practicum in Clinical Nutrition	4
DN A695D	Practicum in Community Nutrition	2
DN A695E	Advanced Practicum in Community Nutrition	2

DN A695F	Practicum in Foodservice Administration	4
Elective coursework *		3
Total Credits		20

* Suggested electives: DN A690 (up to 6 credits can count towards the degree requirements) and other courses approved by academic advisor.

A minimum of 43 credits is required for the Combined Master's Degree and Dietetic Internship Track.

B. Master's Degree Track

Code	Title	Credits
Elective coursework **		4-7
Total Credits		4-7

* Suggested electives: DN A690 (up to 6 credits can count towards the degree requirements) and other courses approved by academic advisor.

** The only credits from the UAA Dietetic Internship Graduate Certificate that may be applied as elective coursework are DN A692A (2 credits) and DN A692B (1 credit), as long as they were completed no more than seven (7) years prior to MS program completion.

A minimum of 30 credits is required for the Master's Degree Track.

Upon completion of MS Dietetics and Nutrition the graduate will be able to:

1. integrate and apply scientific information and research into professional dietetics and nutrition practice. *[Professional Practice Skills]*
2. defend beliefs, values, attitudes and behaviors that are at the professional dietitian level of practice. *[Professional Practice Skills]*
3. provide clinical and customer services by developing and delivering information, products and services to individuals, groups and populations. *[Client Care Skills; Public/Population Health and Community Nutrition Skills]*
4. utilize strategic application of principles of management and systems in the provision of food and nutrition services to individuals and organizations. *[Organizational Leadership/Management Skills; Food and Food Systems Skills]*
5. demonstrate an understanding of Alaska Native culture and Alaska's unique healthcare delivery system. *[Concentration area: Alaska Native Culture and Alaska's Unique Healthcare Delivery System]*

Health Sciences

1901 Bragaw St., Room 220, Anchorage, AK 99508, (907) 786-6540

www.uaa.alaska.edu/healthsciences (<http://www.uaa.alaska.edu/healthsciences>)

Programs of Study

Master of Public Health

- MPH in Public Health Practice (p. 404)

Master of Social Work/Master of Public Health

- MSW/MPH Dual Degree (p. 406)

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Master of Public Health in Public Health Practice

Public health embraces an ecological approach that recognizes the interactions and relationships among multiple determinants of health. Public health professionals typically take a community or population focus. Our graduate program prepares public health practitioners who identify and assess needs of populations; plan, implement and evaluate programs to address those needs; and otherwise assure conditions that protect and promote the health of populations. The Master of Public Health (MPH) in Public Health Practice is an interdisciplinary degree designed to provide a broad background to meet the challenges of the diverse and complex field of public health, with a particular focus on the needs of Alaska and the circumpolar north. Students with backgrounds in the natural sciences, social sciences, health professions, human services, business, education and law have successfully entered the field of public health at the graduate level.

Both mid-career students and recent graduates may pursue their careers with minimal disruption while working on the MPH because all required courses are offered via distance format. Students are required to attend one mandatory meeting in Anchorage each year, typically in conjunction with the Alaska Public Health Summit, and are expected to communicate frequently with their MPH academic advisor. In-person oral defense of capstone thesis in Anchorage is also expected of the student at the end of the MPH program.

This degree requires core courses in health education and behavioral sciences, environmental and occupational health, health management and policy, biostatistics, and epidemiology. It also includes coursework in research methods, program evaluation, circumpolar health issues, and management of public health emergencies and disasters, as well as the opportunity to create an individualized emphasis as the foundation for the required capstone project.

MPH Mission Statement

The MPH in Public Health Practice program at the University of Alaska Anchorage enhances health in diverse communities across

Alaska, the circumpolar north, the nation and the world. This is accomplished through excellence in the education of public health practice leaders, scientific investigation of public health issues and engaging communities in an organized effort to identify, assess, prevent and mitigate community health challenges.

Admission Requirements

Satisfy the Admission Requirements for Graduate Degrees (p. 50). In addition, students should also meet the following criteria when applying for admission to the MPH program:

1. Submit documentation indicating a grade of 2.00 (C or higher) in an introductory statistics course which covers descriptive and inferential statistics.
2. Provide a copy of one professional or technical writing sample of which the student is the primary author.
3. Provide a current resume or curriculum vitae (CV).
4. Submit an essay explaining how and why obtaining the MPH degree would contribute to the student's career goals.
5. Completed applications are reviewed twice each year. The Department of Health Sciences deadlines are March 1 for fall admission and October 1 for spring admission. UAA admission must be successfully processed before the Department of Health Sciences will consider an application complete. The UAA process may take as long as four months, so applicants are encouraged to apply to the university first and early.

Note also that:

1. To the extent that there are limited positions available in the program, preference may be given to residents of the state of Alaska as defined by the university's policy on residency for tuition purposes. To help diversify our public health workforce and better reflect the demographics of our state, we also actively encourage applications from those who may be from underrepresented populations, such as minorities, rural/frontier communities, and/or those who are the first in their family to go to college.
2. Preference may also be given to applicants with two or more years work experience in the field of public health. Such applicants must submit documentation of their public health-related work experience, and a request for special consideration to the admissions committee.
3. Decisions by the Admissions Committee are considered final. Those who are not admitted in the program are encouraged to strengthen their application before re-application.

Professional Program Fee

A professional program fee is required of all students in the MPH program in addition to course tuition fees, lab fees, course material fees, and student activity fees. The professional program fee is a sum equal to 50 percent of resident tuition, and is charged upon enrollment in MPH courses. The fee contributes directly to program support.

Academic Requirements

A student in the MPH program is expected to complete a minimum of 6 semester credits each academic year, beginning with the first semester of enrollment. The 6 semester credits may consist of prerequisite courses or program courses. Failure to comply with the 6 credit minimum each academic year may result in the removal from the program. See also General University Requirements for Graduate Degrees (p. 346) for additional requirements to remain in good standing and to meet academic expectations toward the degree.

Candidacy Requirements

See the section Advancement to Candidacy (p. 346).

Graduation Requirements

- Satisfy the General University Requirements for Graduate Degrees (p. 346).
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
Core Courses		
HS A605	Public Health and Society	3
HS A610	Environmental and Occupational Health	3
HS A615	Health Services Administration	3
HS A624	Circumpolar Health Issues	3
HS A625	Biostatistics for Health Professionals	3
HS A626	Principles of Epidemiology	3
HS/SWK A628	Program Evaluation	3
HS A629	Public Health Research Tools and Methods	4
HS A630	Public Health Emergencies and Disasters	3
Complete three focused public health-related emphasis courses at the 600-level with advisor approval		9
HS A698 or HS A699	MPH Practicum-Project MPH Practicum-Thesis	5
Total Credits		42

A total of 42 credits is required for the degree.

MPH Program Goals and Program-Level Objectives

Based on national accreditation criteria and quality standards, the program goals are:

Service

To provide leadership and service to enhance public health practice at the local, state, national and international levels.

1. Provide expertise to public health agencies and organizations in the surrounding region in order to find innovative solutions to existing public health problems.
2. Promote collaboration with a variety of public and private agencies in the rural areas and the surrounding region to meet current and future public health practice needs.
3. Provide leadership to national, regional, and state public health and community health education professional organizations.

Teaching and Research

To develop an academic public health program that contributes to and helps train students and support faculty to participate in conducting and translating the growing body of knowledge to enhance the health of communities and strengthen evidence-based public health practice.

1. Support a local and global research agenda through enhanced international collaboration and increased graduate student involvement in research.
2. Increase the opportunities for students to participate in and learn from faculty-directed research designed to inform public health decision-making.
3. Facilitate qualitative, quantitative, and mixed-method research.
4. Stimulate innovative, crosscutting, interdisciplinary research (grounded in the ecological model) that will help solve public health problems.
5. Facilitate the publication and dissemination of student and faculty research.
6. Strengthen and support student and faculty capacity for conducting ethical research.

Workforce Development

To provide an instructional program that enhances public health education practice and strengthens the capacity of the existing public health workforce.

1. Conduct needs and/or asset assessments of communities or professionals in region to determine needs for workforce capacity building.
2. Conduct continuing education programs that help meet the needs determined in the assessments above.
3. Facilitate student collaboration with faculty to participate in community and continuing education.
4. Periodically evaluate the current program, student/faculty perceptions and experiences.
5. Revise or enhance courses, the program, opportunities, and resources based on an evolving body of knowledge and on results of periodic evaluations.
6. Create and/or enhance mechanisms (media, pamphlets/fliers, meetings, seminars, and others) to provide educational opportunities for education regarding ongoing and emerging public health issues, especially those based on community concerns.
7. Provide student MPH opportunities in communities to disseminate information and foster action on public health issues.

Student Outcomes

To prepare public health professionals who can demonstrate attainment of our MPH program competencies.

- 1. Give, solicit and receive oral, written, graphic and numerical information, taking into consideration target audience and using a variety of mechanisms in both formal and informal settings. [Competency: Communication]
- 2. Interact sensitively and professionally with individuals and communities with diverse characteristics. [Competency: Diversity and cultural proficiency]
- 3. Create and communicate a shared vision to improve the public’s health.
- 4. Develop and champion solutions to population health challenges.
- 5. Demonstrate ethical choices, values and professional practices implicit in public health decisions, giving consideration to the effect of choices on community stewardship, equity, social justice and accountability, as well as to commit to personal and institutional development. [Competency: Professionalism and ethics]
- 6. Design, develop, implement and evaluate strategies and interventions to improve individual and community health. [Competency: Program planning and assessment]
- 7. Recognize dynamic interactions among human and social systems and how they affect the relationships among individuals, groups, organizations and communities. [Competency: Systems thinking]
- 8. Utilize biostatistics in the practice of public health. [Competency: Biostatistics]
- 9. Design, develop, implement and evaluate approaches for assessing, preventing and controlling environmental hazards that pose risks to human health and safety. [Competency: Environmental health]
- 10. Utilize epidemiological skills for informing scientific, ethical, economic and public health policy decisions on health issues. [Competency: Epidemiology]
- 11. Understand the main components and issues of the organization, financing and delivery of health services and public health systems in the US. [Competency: Health policy and management]
- 12. Understand the role of social, behavioral and community factors in both the onset and solution of public health problems. [Competency: Social and behavioral science].

Environment

To create an environment where diverse faculty, students, and staff work collaboratively and respectfully to promote public health.

- 1. Maintain a diverse student body that reflects the diversity of the region we serve.
- 2. Maintain a student body with diverse educational and professional backgrounds.
- 3. Provide a multi-disciplinary, ethnically diverse, and experienced public health faculty and staff.
- 4. Provide students with contact and involvement with diverse communities and peoples within and outside the MPH program, that provide and/or enhance knowledge and experience.

- 5. Annually monitor and continually evaluate processes for recruitment and admission into the program.

Dual Degree, Master of Social Work/ Master of Public Health

The Master of Social Work/Master of Public Health (MSW/MPH) dual degree provides academic training in order to maximize the impact of both public health and social work practices. This dual degree develops expertise at the nexus of public health and social work. The goal of this program is to train leaders who have the skills and competencies to address many of the social and public health problems facing the state of Alaska, this nation and the world.

An advantage of the dual MSW/MPH option is that by mutual agreement between the two programs, some courses count toward graduation requirements in both programs. Thus the time to complete both degrees and the total number of credits required has been reduced. The time to complete both degrees for a full-time student is approximately three years (nine semesters). If both degrees were pursued sequentially, the minimum time to the degrees is four years (12 semesters). Similarly, the total number of credits to acquire the dual degree is fewer than 80; the total number of credits for sequentially obtaining both degrees is 105.

Admission Requirements

- Satisfy the Admission Requirements for Graduate Degrees (p. 50).
- Students must apply separately and meet the admission requirements of both the MSW (p. 418) and MPH (p. 404) programs. See those programs for specific requirements.

Advising

Each student will have two academic advisors, one for each degree program. Students will have two graduate studies plans (GSPs), one for each degree program. The GSPs will vary based on full or part-time status and the semester of entry into the MSW or MPH program.

Academic Requirements

To maintain satisfactory academic progress toward the dual degrees, a student is expected to be in good standing in both academic programs. See Graduate Degree Policies (p. 349) for additional requirements.

Graduation Requirements

- Satisfy the General University Requirements for Graduate Degrees (p. 346).
- Complete the program requirements below.

Each degree will be awarded when the requirements for graduation for that degree have been met.

Program Requirements

Code	Title	Credits
Complete the following MPH core courses:		
HS A605	Public Health and Society	3

HS A610	Environmental and Occupational Health	3
HS A615	Health Services Administration	3
HS A624	Circumpolar Health Issues	3
HS A625	Biostatistics for Health Professionals	3
HS A626	Principles of Epidemiology	3
HS/SWK A628	Program Evaluation	3
HS A629	Public Health Research Tools and Methods	4
HS A630	Public Health Emergencies and Disasters	3
HS A698 or HS A699	MPH Practicum-Project MPH Practicum-Thesis	5
Total Credits		33

Code	Title	Credits
Complete the following MSW core courses:		
SWK A607	Social Welfare Policy and Services	3
SWK A608	Social Policy for Advanced Generalist Practice	3
SWK A630	Practice I: Individuals	3
SWK A631	Introduction to Social Work Practice	3
SWK A632	Practice II: Families and Groups	3
SWK A633	Advanced Generalist Practice II: Families and Groups	3
SWK A634	Advanced Generalist Practice III: Organizations and Communities	3
SWK A635	Transformational Leadership Capstone	3
SWK A636	Practice III: Organizations and Communities	3
SWK A642	Human Behavior in the Social Environment	3
SWK A643	Human Diversity in Social Work Practice	3
SWK A644	Social Work Practicum I	3
SWK A645	Social Work Practicum II	3
SWK A646	Advanced Generalist Practicum I	3
SWK A647	Advanced Generalist Practicum II	3
Total Credits		45

A minimum of 77 credits is required for the Master of Social Work and Master of Public Health dual degree.

Nursing

Health Sciences Building (HSB), Room 101, (907) 786-4550
www.uaa.alaska.edu/schoolofnursing (<http://www.uaa.alaska.edu/schoolofnursing>)

Nursing Doctoral Degree Program

Graduate studies at the doctoral level place primary emphasis upon advanced professional nursing practice, theory, research and leadership roles in advancing health care delivery systems and application of research into practice. The Doctor of Nursing Practice (DNP) represents the highest degree in nursing practice. The DNP program at the UAA SON is accredited through 2021 by the Commission on Collegiate Nursing Education (CCNE), One Dupont Circle, NW, Suite 530, Washington, DC 20036, (202) 887-6791.

There are two pathways for the DNP degree.

- The post-baccalaureate DNP pathway is for registered nurses who have completed a Bachelor of Science in Nursing degree or a Master of Science in Nursing degree with a generalist (non-APRN) or nursing education focus. They will develop advanced practice primary care skills for individuals across the life-span as a Family Nurse Practitioner (FNP) or as a Psychiatric-Mental Health Nurse Practitioner (PMH-NP). In addition, they will expand their knowledge and skills to interpret research, apply best practices, and incorporate clinical knowledge and leadership skills to influence health care systems and policy. In fall 2019, the post-baccalaureate DNP pathway will replace the current master's degree nurse practitioner options (FNP and PMH-NP). Contact a DNP advisor for details.
- The post-masters DNP pathway is for individuals who are master's prepared Advanced Practice Registered Nurses (APRNs) and are certified nurse practitioners (NPs), certified nurse midwives (CNMs), or certified registered nurse anesthetists (CRNAs). Since students in this pathway are already educated in a population focused advanced practice role, the program is designed to expand their knowledge and skills to interpret research, apply best practices, and incorporate clinical knowledge and leadership skills to influence health care systems and policy.

Nursing Master's Degree Programs

Graduate studies at the master's level place primary emphasis upon advanced professional nursing practice, theory, research and health care delivery systems. The master's program is accredited through 2025 by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326, (404) 975-5000. Students may develop a specialized practice focus in nursing leadership (NLDR) with a concentration in nursing education (NLDR-educ) or administration (NLDR-admin), as a family nurse practitioner (FNP) or psychiatric-mental health nurse practitioner (PMH-NP). In fall 2019, the FNP and PMH-NP will transition to the DNP (see Nursing Doctoral Degree Program above).

Nursing Graduate Certificate Programs

The nursing graduate certificate programs were designed for individuals who have previously acquired their master's or doctoral degrees in nursing and wish to expand their nursing competencies or practice. The graduate certificate programs are accredited through 2025 by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326, (404) 975-5000. Graduate certificate programs are offered in several specialty areas:

family nurse practitioner (FNP), psychiatric-mental health nurse practitioner (PMH-NP) or nurse educator (EDUC). Prior nursing degrees must be issued from institutions that hold regional accreditation and from programs that hold nursing accreditation (from either the ACEN or the CCNE). The graduate certificate curriculum builds on the student's prior graduate degree in nursing by integrating content from that degree with theory-based advanced practice nursing courses and specialty clinical practice. **To be eligible for either the FNP or PMH-NP graduate certificate programs, the individual must already be certified as a nurse practitioner in another specialty.**

Programs of Study

Master of Science

- MS in Nursing Science (p. 408)

Graduate Certificates

- Certificate in Family Nurse Practitioner (p. 411)
- Certificate in Nursing Education (p. 413)
- Certificate in Psychiatric-Mental Health Nurse Practitioner (p. 414)

Doctor of Nursing Practice

- DNP in Nursing Science (p. 416)

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Master of Science in Nursing Science

Graduate studies at the master's level place primary emphasis upon advanced professional nursing practice, theory, research and health care delivery systems. Master's level studies provide the student with a basis for further study at the doctoral level. Students may develop a specialized practice focus in nursing leadership (NLDR) with a concentration in nursing education (NLDR-educ) or administration (NLDR-admin). We also have a family nurse practitioner (FNP) or psychiatric-mental health nurse practitioner (PMH-NP) master's option through 2019. In 2019, it will be transitioned to the Doctor of Nursing Practice degree with an FNP or PMH-NP pathway option.

- Graduates of the FNP option are eligible to write the national certification examination for advanced professional practice as a family nurse practitioner offered by the American Nurses Credentialing Center (ANCC) or the American Academy of Nurse Practitioners (AANP).
- Graduates of the PMH-NP option are eligible to write the national certification exam for advanced professional practice as a psychiatric-mental health nurse practitioner (across the lifespan) offered by ANCC.
- Graduates of the NLDR-education option are eligible to take the National League of Nursing (NLN) Certified Nurse Educator Examination.
- Graduates of the NLDR-admin option, with two years of executive nursing experience, are eligible to take the American Organization of Nurse Executives (AONE) exam for certification in Executive Nursing Practice.

Part-Time/Full-Time Study

The Master's program is designed to be completed in six to eight trimesters of part-time study. Registered nurses with a BSN who are not formally admitted to the program are allowed to register for up to 9 credits of core courses on a space-available basis and with instructor permission. Enrollment in any specialty course requires formal admission to the specialty track. Students interested in full-time study should explore options with the program faculty advisor.

Scheduling of Courses

The NLDR option can be completed online, with class time being synchronous (entire class participating at the same time) or asynchronous. The FNP and PMH-NP options are hybrid. Core courses and some specialty courses are completely online, with synchronous or asynchronous delivery. The FNP and PMH-NP clinical courses and physical assessment are in a hybrid format with short face-to-face

intensives required (usually 1-2 campus visits/trimester). Additional course work is held throughout the semester at scheduled times, with distance students participating live via software programs such as Skype or Collaborate.

Currently, PMH-NP and FNP clinicals must be completed in the state of Alaska. Anchorage students may be required to do their clinical anywhere in the Anchorage Metropolitan Statistical area, which includes the Mat-Su borough to the north and Girdwood to the south. When possible and at the request of the student, clinical rotations are completed in the students' own community. Decisions for clinical sites are based on there being adequate local experiences and preceptors that allow the student to meet the course and program outcomes. Thus, it is possible for students who reside outside of Anchorage to take advantage of the opportunity to pursue graduate study at UAA. All students are encouraged to take advantage of clinical learning opportunities throughout the state, including both urban and rural settings.

Admission Requirements

Satisfy the **Admission Requirements for Graduate Degrees** (p. 50).

School of Nursing Admission Deadlines

Information on admission deadlines can be found on the **SON website**.

- The Psychiatric-Mental Health Nurse Practitioner (PMH-NP) and Family Nurse Practitioner (FNP) programs admit once a year and have a specific deadline for applications.
- The Nursing Leadership (NLDR) program has a rolling admission and candidates are reviewed each semester, when an application is complete.
- All applicants may take up to 9 credits of core courses, on a space available basis and with faculty permission, while waiting for their application to be processed.

School of Nursing Admission Requirements

To be eligible for the Master's program applicants must submit documentation of the following:

- Bachelor or graduate degree in nursing from a program accredited by the Accreditation for Education in Nursing (ACEN) or the Commission on Collegiate Nursing Education (CCNE).
- Minimum undergraduate or graduate GPA of 3.00 (B) on a 4.00 scale. A student who does not have a minimum GPA of 3.00 may substitute their graduate UAA GPA (based on completion of three graduate core courses and earning a 3.00 or higher in each course).
- Minimum grade of 2.00 (C) in an undergraduate or graduate research methods course and a statistics course that covers descriptive and inferential statistics.
- Registered professional nurse license in the state of Alaska. License must remain active and unencumbered while in the School of Nursing (SON) graduate program. There are different reasons for a license to be encumbered and some may not preclude admission to the program. Students with encumbered licenses should meet with the graduate chair to determine program eligibility.

- Minimum of one year of full-time clinical experience as a registered nurse.

School of Nursing Admission Process

The UAA School of Nursing application process can be found on the **SON website**.

Additional School of Nursing Requirements

Once accepted to the Master's program, students will receive instructions for submission of the following requirements*:

- Documentation of continuous current certification in cardiopulmonary resuscitation (CPR) for adults, infants and children.
- Evidence of satisfactory health status, including immunity to chicken pox, rubella, rubeola, and hepatitis A and B (by titer); documentation of Tdap (tetanus, diphtheria, pertussis) immunization within the past 10 years; annual PPD skin test or health examination indicating freedom from active tuberculosis; documentation of an annual HIV test (results not required);
- Results of the SON-sanctioned national-level criminal background check.
 - * *The above requirements may change based on the demands of clinical facilities. Please check with the SON for the most recent list of requirements.*

Students are required to provide their own transportation to clinical sites. They are also responsible for their portion of the cost of audio-conferencing. Students must have access to a personal computer and reasonable Internet connectivity. Prior to entry into the nursing program, students are expected to have graduate level writing and American Psychological Association (APA) referencing skills, as well as basic computer and typing skills, for example:

- Word processing,
- Sending and receiving e-mail with attachments,
- Accessing and navigating the Internet/World Wide Web,
- Basic understanding of hardware, software and operating systems.

FNP & PMH-NP Clinical Requirements

Alaska clinical site decisions are based on the availability of qualified preceptors and agencies that provide adequate experiences so the student can meet the course and program outcomes. Whenever possible we assign sites in or near a student's home community. Student clinical hours must follow the preceptors' work schedules (usually M-F). All students are encouraged to take advantage of clinical learning opportunities throughout Alaska in both urban and rural settings.

Academic Requirements

Students enrolled in the master's degree program must make continuous progress toward completion of the degree and remain in good standing with the School of Nursing (SON). A detailed schematic of the SON good standing policy can be found in the SON Graduate Handbook (<http://www.uaa.alaska.edu/schoolofnursing/studenthandbooks.cfm>). Noncompliance with the good standing policy and academic

expectations will result in probation and possible dismissal from the program. To remain in good standing students must:

- Maintain professional and academic standards at all times.
- Earn a minimum 3.00 (B) in all required coursework.
- Maintain continuous enrollment each fall and spring semester until degree is granted.

Graduation Requirements

- Satisfy the **General University Requirements for Graduate Degrees** (p. 346).
- Complete the program requirements below for one of the following options: FNP, PMH-NP, or NLDR with a focus on education (NLDR-educ) or administration (NLDR-admin).

Program Requirements

Family Nurse Practitioner and Psychiatric-Mental Health Nurse Practitioner Options

Code	Title	Credits
Core Courses *		
NSG A613	Advanced Practice Informatics	2
NSG A618	Role Development in Advanced Nursing	2
NSG A618A	Advanced Nursing Leadership	2
NSG A619	Nursing Health Policy	2
NSG A621	Knowledge Development for Advanced Nursing Practice	3
NSG A627	Practice Inquiry I: The Nature of Evidence	3
NSG A633	Statistics for Advanced Practice	3
Total Credits		17

* *Students seeking a second master's degree may petition to have core courses waived based on evaluation of prior graduate degree.*

Complete one of the following options:

Code	Title	Credits
Family Nurse Practitioner Option		
NSG A662	Family Nurse Practitioner III	5
NSG A663	Family Nurse Practitioner IV	6
NSG A601	Advanced Pathophysiology	3
NSG A602	Advanced Health Assessment in Primary Care	4
NSG A610	Pharmacology for Primary Care	3
NSG A660	Family Nurse Practitioner I	5
NSG A661	Family Nurse Practitioner II	4
Advisor-approved elective		3
Total Credits		33

Code	Title	Credits
Psychiatric-Mental Health Nurse Practitioner Option		
NSG A670	Advanced Practice Psychiatric and Mental Health Nursing I	5
NSG A671	Advanced Practice Psychiatric and Mental Health Nursing II	5
NSG A672	Advanced Practice Psychiatric and Mental Health Nursing III	5
NSG A673	Advanced Practice Psychiatric and Mental Health Nursing IV	5
NSG A601	Advanced Pathophysiology	3
NSG A602	Advanced Health Assessment in Primary Care	4
NSG A610	Pharmacology for Primary Care	3
NSG A611	Psychopharmacology for Advanced Nursing	3
Total Credits		33

A total of 50 credits is required for the degree.

Nursing Leadership Option

All NLDR students complete the core courses and then select one of two options: nursing education or administration.

Code	Title	Credits
Core Courses *		
NSG A618A	Advanced Nursing Leadership	2
NSG A619	Nursing Health Policy	2
NSG A621	Knowledge Development for Advanced Nursing Practice	3
NSG A627	Practice Inquiry I: The Nature of Evidence	3
NSG A633	Statistics for Advanced Practice	3
NSG A647	Evidence-Based Practicum for Nursing	3
Total Credits		16

* *Students seeking a second master's degree may petition to have core courses waived based on evaluation of prior graduate degree.*

Complete one of the following options:

Code	Title	Credits
Leadership in Education		
NSG A640	Teaching and Learning in the Professional Context	3
NSG A641	Developing Curriculum for Nursing and Other Professions	3
NSG A643	Course and Curriculum Evaluation for Professionals	4
NSG A644	Technology for Learning and Collaboration	2

Advisor-approved elective	3
Total Credits	15

Code	Title	Credits
Leadership in Administration		
NSG A613	Advanced Practice Informatics	2
NSG A615	Health Services Organization and Finance	4
Select two courses from the following list		6
HS A615	Health Services Administration	
HS/SWK A628	Program Evaluation	
PADM A601	Introduction to Public Administration	
PADM A603	Management Analysis	
PADM A610	Public and Non-Profit Organizational Behavior	
PADM A624	Human Resources Administration and Labor Relations	
PADM A688	Program Evaluation and Performance Measurement	
Advisor-approved elective		3
Total Credits		15

A minimum of 32 credits is required for the degree.

Program Student Learning Outcomes

The graduate is prepared to:

1. Engage in scholarly inquiry, including evaluation and application of evidence-based research to advanced nursing practice or leadership.
2. Practice in a manner that incorporates ethical, legal, and professional standards for advanced nursing practice or nursing leadership.
3. Collaborate across disciplines and in partnership with communities, groups, families and individuals through culturally sensitive practice.
4. Demonstrate competence and caring in the professional nurse role to serve as a provider, leader, and educator in the health care system.
5. Articulate a plan for self-directed, lifelong learning and professional development.

Graduate Certificate in Family Nurse Practitioner

The Family Nurse Practitioner (FNP) Graduate Certificate is available to nurses who already have a graduate degree in nursing and are certified as psychiatric-mental health nurse practitioners, adult nurse practitioners, women's health nurse practitioners or pediatric nurse practitioners. The program expands their scope of practice to assist them to acquire the theory, knowledge and skills needed to provide primary care for families. Courses and seminars are scheduled to allow students to attend classes with content specific to expand their specialty

practice to include a family scope. The curriculum includes didactic, seminar and clinical hours in practicum coursework. The graduate certificate program is accredited by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326, (404) 975-5000. Students who successfully complete the graduate certificate program will be eligible to take the family nurse practitioner examination offered by the American Nurses Credentialing Center (ANCC) or the American Academy of Nurse Practitioners (AANP) to become certified as a family nurse practitioner. These examinations are given nationwide throughout the year.

Scheduling of Courses

The FNP clinical courses are in a hybrid format with some short face-to-face intensives required (usually 1-2 campus visits/semester). Additional course work is held throughout the semester at scheduled times, with distance students participating live via software programs such as Skype or Collaborate. All FNP clinical must be completed in the state of Alaska and in most instances clinical is done in the students' own community. Decisions for clinical sites are based on there being adequate experiences and preceptors locally that allow the student to meet the course and program outcomes. Thus, it is possible for students who reside in Alaska, outside of Anchorage, to take advantage of the opportunity to pursue a graduate certificate at UAA. In addition, all students have the opportunity to take advantage of clinical learning opportunities throughout the state, including both urban and rural settings.

Admission Requirements

Satisfy the Admission Requirements for Graduate Certificates (p. 50).

School of Nursing Admission Deadlines

Information on admission deadlines can be found on the SON website. (<http://www.uaa.alaska.edu/schoolofnursing>) The Family Nurse Practitioner (FNP) program admits once a year and has a specific deadline for the application.

School of Nursing Admission Requirements

To be eligible for the FNP Graduate Certificate applicants must submit documentation of the following:

- Graduate degree in nursing (master's or doctoral) from a school of nursing accredited by the Commission on Collegiate Nursing Education (CCNE) or the Accreditation Commission for Education in Nursing (ACEN).
- Registered professional nurse license in the state of Alaska. License must remain active and unencumbered while in the School of Nursing (SON) graduate program. There are different reasons for a license to be encumbered and some may not preclude admission to the program. Students with encumbered licenses should meet with the graduate chair to determine program eligibility.
- Active unencumbered license as an advanced practice nurse in the state of Alaska. License must remain active and unencumbered while in the graduate certificate program.
- Documentation of national certification as an advanced nurse practitioner.

- Meet with faculty advisor to develop an academic plan of study based on a gap analysis (see SON website (<http://www.uaa.alaska.edu/schoolofnursing>) for advisor contact information).

School of Nursing Admission Process

The UAA School of Nursing application process can be found on the SON website (<http://www.uaa.alaska.edu/schoolofnursing>).

Additional School of Nursing Requirements

Once accepted to the FNP Graduate Certificate program, students will receive instructions for submission of the following requirements*:

- Documentation of continuous current certification in cardiopulmonary resuscitation (CPR) for adults, infants, and children;
- Evidence of satisfactory health status, including immunity to chicken pox, rubella, rubeola, and hepatitis A and B (by titer); documentation of Tdap (tetanus, diphtheria, pertussis) immunization within the past 10 years; annual PPD skin test or health examination indicating freedom from active tuberculosis; documentation of an annual HIV test (results not required); and
- The results of the SON-sanctioned national level criminal background check.

*The above requirements may change based on the demands of clinical facilities. Please check with the SON for the most recent list of requirements.

Students are required to provide their own transportation to clinical sites. They are also responsible for their portion of the cost of audio conferencing. Students must have access to a personal computer and reasonable Internet connectivity. Prior to entry into the nursing program, students are expected to have graduate-level writing and American Psychological Association (APA) referencing skills, as well as basic computer and typing skills, for example:

- Word processing,
- Sending and receiving e-mail with attachments,
- Accessing and navigating the Internet/World Wide Web, and
- Basic understanding of hardware, software, and operating systems.

FNP Clinical Requirements

Alaska clinical site decisions are based on the availability of qualified preceptors and agencies that provide adequate experiences so the student can meet the course and program outcomes. Whenever possible we assign sites in or near a student's home community. Student clinical hours must follow the preceptors' work schedules (usually M-F). All students are encouraged to take advantage of clinical learning opportunities throughout Alaska in both urban and rural settings.

Academic Requirements

Students enrolled in the FNP Graduate Certificate program must make continuous progress toward completion of the certificate and remain in good standing with the SON. A detailed schematic of the SON good standing policy can be found in the SON Graduate Handbook

(<http://www.uaa.alaska.edu/schoolofnursing/studenthandbooks.cfm>). Noncompliance with the good standing policy and academic progress expectations will result in probation and possible dismissal from the program. In order to remain in good standing students must:

- Maintain professional and academic standards at all times.
- Maintain continuous registration each fall and spring semester until certificate is granted.
- Earn a minimum grade of 3.00 (B) in all required coursework.

Graduation Requirements

- Satisfy the General University Requirements for Graduate Certificates. (p. 353)
- Complete the program requirements below.

Program Requirements

The program requirements are based on what type of nurse practitioner certification the individual already has; additional coursework may be required based on the transcript gap analysis that is done by the academic advisor.

Code	Title	Credits
Requirements for Practicing Adult Nurse Practitioners		
NSG A660	Family Nurse Practitioner I	5
NSG A661	Family Nurse Practitioner II	4
NSG A663	Family Nurse Practitioner IV	6
Total Credits		15

Code	Title	Credits
Requirements for Practicing Pediatric Nurse Practitioners		
NSG A661	Family Nurse Practitioner II	4
NSG A662	Family Nurse Practitioner III	5
NSG A663	Family Nurse Practitioner IV	6
Total Credits		15

Code	Title	Credits
Requirements for Practicing Psychiatric-Mental Health Nurse Practitioners		
NSG A660	Family Nurse Practitioner I	5
NSG A661	Family Nurse Practitioner II	4
NSG A662	Family Nurse Practitioner III	5
NSG A663	Family Nurse Practitioner IV	6
NSG A601	Advanced Pathophysiology	3
NSG A602	Advanced Health Assessment in Primary Care	4
NSG A610	Pharmacology for Primary Care	3
NSG A611	Psychopharmacology for Advanced Nursing	3
Total Credits		33

Code	Title	Credits
Women's Health Nurse Practitioner		
NSG A660	Family Nurse Practitioner I	5
NSG A662	Family Nurse Practitioner III	5
NSG A663	Family Nurse Practitioner IV	6
Total Credits		16

A total of 15-33 credits is required for the certificate.*

* *Students need to have had an advanced pharmacology, pathophysiology and health assessment course in their original nursing master's program; if their program did not include some or all of these courses, they may need to be taken for the graduate certificate.*

Program Student Learning Outcomes

The graduate is prepared to:

1. Engage in scholarly inquiry, including evaluation and application of evidence-based research to advanced nursing practice or nursing leadership.
2. Practice in a manner that incorporates ethical, legal, and professional standards for advanced nursing practice or nursing leadership.
3. Collaborate across disciplines and in partnership with communities, groups, families and individuals through culturally sensitive practice.
4. Demonstrate competence and caring in the professional nurse role to serve as a leader, provider, and educator in the health care system.
5. Articulate a plan for self-directed, lifelong learning and professional development.

Graduate Certificate in Nursing Education

The Nursing Education Graduate Certificate is available for nurses who are already have a graduate degree in nursing and are seeking to develop advanced knowledge and skills in order to teach in academic or clinical settings. The coursework emphasizes instruction in teaching, program and course development, implementation, and evaluation.

The curriculum is based on standards for master's education outlined in the Essentials for Master's Education in Nursing published by the American Association of Colleges of Nursing (2011), as well as the developed Core Competencies of Nurse Educators proposed by the National League for Nursing (NLN). Graduates of the program are eligible to take the NLN Certified Nurse Educator Examination.

Scheduling of Courses

All courses for the Nursing Education Graduate Certificate are offered using distance delivery technologies, in a synchronous or asynchronous format. Whenever possible teaching practica may be completed in the student's community, or in the event the type of practica needed is not available in the student's home community, travel to a larger

community may be necessary. Faculty are able to validate teaching competencies through site visits, video and/or conference calls.

Admission Requirements

Satisfy the **Admission Requirements for Graduate Certificates** (p. 50).

School of Nursing Admission Deadlines

Information on admission deadlines can be found on the **SON website**. Applications for the Graduate Certificate in Nursing Education (EDUC) are reviewed once a semester as they are completed.

School of Nursing Admission Requirements

To be eligible for the Graduate Certificate in Nursing Education applicants must submit documentation of the following requirements:

- Graduate degree in nursing (master's or doctoral) from a school of nursing accredited by the Commission on Collegiate Nursing Education (CCNE) or the Accreditation Commission for Education in Nursing (ACEN).
- Registered professional nurse license in the state of Alaska. License must remain active and unencumbered while in the School of Nursing (SON) graduate program. There are different reasons for a license to be encumbered and some may not preclude admission to the program. Students with encumbered licenses should meet with the graduate chair to determine program eligibility.
- Meet with faculty advisor to develop a plan of study (see **SON website** for advisor contact information).

School of Nursing Admission Process

The UAA School of Nursing application process can be found on the **SON website**.

Additional School of Nursing Requirements

Once admitted to the Nursing Education Graduate Certificate program, students will receive instructions for submission of the following requirements*:

- Documentation of continuous current certification in cardiopulmonary resuscitation (CPR) for adults, infants, and children;
- Evidence of satisfactory health status, including immunity to chicken pox, rubella, rubeola, and hepatitis A and B (by titer); documentation of Tdap (tetanus, diphtheria, pertussis) immunization within the past 10 years; annual PPD skin test or health examination indicating freedom from active tuberculosis; documentation of an annual HIV test (results not required); and
- The results of the SON-sanctioned national level criminal background check.

* *The above requirements may change based on the demands of clinical facilities. Please check with the SON for the most recent list of requirements.*

Students are required to provide their own transportation to clinical sites. They are also responsible for their portion of the cost of audio

conferencing. Students must have access to a personal computer and reasonable Internet connectivity. Prior to entry into the nursing program, students are expected to have graduate-level writing and American Psychological Association (APA) referencing skills, as well as basic computer and typing skills, for example:

- Word processing,
- Sending and receiving e-mail with attachments,
- Accessing and navigating the Internet/World Wide Web, and
- Basic understanding of hardware, software, and operating systems.

Academic Requirements

Students enrolled in the Nursing Education Graduate Certificate program must make continuous progress toward completion of the certificate and remain in good standing with the SON. Noncompliance with the good standing policy and academic progress expectations will result in probation and possible dismissal from the program. A detailed schematic of the SON academic good standing policy can be found in the **SON Graduate Handbook** (<http://www.uaa.alaska.edu/schoolofnursing/studenthandbooks.cfm>). In order to remain in good standing, students must:

- Maintain professional and academic standards at all times.
- Maintain continuous registration each fall and spring semester until certificate is granted.
- Earn a minimum grade of 3.00 (B) in all required coursework.

Graduation Requirements

- Satisfy the **General University Requirements for Graduate Certificates**.
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
NSG A640	Teaching and Learning in the Professional Context	3
NSG A641	Developing Curriculum for Nursing and Other Professions	3
NSG A643	Course and Curriculum Evaluation for Professionals	4
NSG A644	Technology for Learning and Collaboration	2
NSG A647	Evidence-Based Practicum for Nursing	3
Total Credits		15

A total of 15 credits is required for the certificate.*

* Students need to have had an advanced pharmacology, pathophysiology and health assessment course in their original nursing master's program; if their program did not include some or all of these courses, they may need to be taken for the graduate certificate.

Program Student Learning Outcomes

The graduate is prepared to:

- Engage in scholarly inquiry, including evaluation and application of evidence-based research to advanced nursing practice or nursing leadership.
- Practice in a manner that incorporates ethical, legal and professional standards for advanced nursing practice or nursing leadership.
- Collaborate across disciplines and in partnership with communities, groups, families and individuals through culturally sensitive practice.
- Demonstrate competence and caring in the professional nurse role to serve as a leader, provider and educator in the health care system.
- Articulate a plan for self-directed, lifelong learning and professional development.

Graduate Certificate in Psychiatric-Mental Health Nurse Practitioner

The Psychiatric-Mental Health Nurse Practitioner (PMH-NP) Graduate Certificate is available to nurses who already have a graduate degree in nursing and are certified as advanced nurse practitioners in fields other than psychiatric-mental health. The program expands their scope of practice to assist them to acquire the theory, knowledge and skills needed to provide psychiatric-mental health services to families. The curriculum includes didactic, seminar and clinical hours. Graduates of the PMH-NP option are eligible to write the national certification exam for psychiatric mental health nurse practitioner (across the lifespan) offered by the American Nurses Credentialing Center (ANCC). This examination is given nationwide throughout the year. The Psychiatric-Mental Health Nurse Practitioner Graduate Certificate program is accredited by the Accreditation Commission for Education in Nursing (ACEN), formerly known as the National League for Nursing Accreditation Commission (3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326; 404-975-5000).

Scheduling of Courses

The PMH-NP clinical courses are in a hybrid format with some short face-to-face intensives required (usually 1-2 campus visits/semester). Additional course work is held throughout the semester at scheduled times, with distance students participating live via software programs such as Skype or Collaborate. All PMH-NP clinical must be completed in the state of Alaska and in most instances, clinical is done in the students' own community. Decisions for clinical sites are based on there being adequate experiences and preceptors locally that allow the student to meet the course and program outcomes. Thus, it is possible for students who reside in Alaska, outside of Anchorage, to take advantage of the opportunity to pursue a graduate certificate at UAA. In addition, all students have the opportunity to take advantage of clinical learning opportunities throughout the state, including both urban and rural settings.

Admission Requirements

Satisfy Admission Requirements for Graduate Certificates (p. 50).

School of Nursing Admission Deadlines

Information on admission deadlines can be found on the SON website. (<http://www.uaa.alaska.edu/schoolofnursing>) The Psychiatric-Mental Health Nurse Practitioner (PMH-NP) program admits once a year and has a specific deadline for the application.

School of Nursing Admission Requirements

To be eligible for the PMH-NP Graduate Certificate a candidate must have the following:

- Graduate degree in nursing (master's or doctoral) from a school of nursing accredited by the Commission on Collegiate Nursing Education (CCNE) or the Accreditation Commission for Education in Nursing (ACEN).
- Registered professional nurse license in the state of Alaska. License must remain active and unencumbered while in the School of Nursing (SON) graduate program. There are different reasons for a license to be encumbered and some may not preclude admission to the program. Students with encumbered licenses should meet with the graduate chair to determine program eligibility.
- Active unencumbered license as an advanced practice nurse in the state of Alaska. License must remain active and unencumbered while in the graduate certificate program.
- Documentation of national certification as an advanced nurse practitioner.
- Meet with faculty advisor to develop an academic plan of study based on a gap analysis (see SON website (<http://www.uaa.alaska.edu/schoolofnursing>) for advisor contact information).

School of Nursing Admission Process

The UAA School of Nursing application process can be found on the SON website (<http://www.uaa.alaska.edu/schoolofnursing>).

Additional School of Nursing Requirements

Once admitted to the PMH-NP Graduate Certificate program, students will receive instructions for submission of the following requirements*:

- Documentation of continuous current certification in cardiopulmonary resuscitation (CPR) for adults, infants and children.
- Evidence of satisfactory health status, including immunity to chicken pox, rubella, rubeola, and hepatitis A and B (by titer); documentation of Tdap (tetanus, diphtheria, pertussis) immunization within the past 10 years; annual PPD skin test or health examination indicating freedom from active tuberculosis; documentation of an annual HIV test (results not required); and
- Results of the SON-sanctioned national-level criminal background check.

* *The above requirements may change based on the demands of clinical facilities. Please check with the SON for the most recent list of requirements.*

Students are required to provide their own transportation to clinical sites. They are also responsible for their portion of the cost of audio-

conferencing. Students must have access to a personal computer and reasonable Internet connectivity. Prior to entry into the nursing program, students are expected to have graduate level writing and American Psychological Association (APA) referencing skills, as well as basic computer and typing skills, for example:

- Word processing,
- Sending and receiving e-mail with attachments,
- Accessing and navigating the Internet/World Wide Web,
- Basic understanding of hardware, software and operating systems.

PMH-NP Clinical Requirements

Alaska clinical site decisions are based on the availability of qualified preceptors and agencies that provide adequate experiences so the student can meet the course and program outcomes. Whenever possible we assign sites in or near a student's home community. Student clinical hours must follow the preceptors' work schedules (usually M-F). All students are encouraged to take advantage of clinical learning opportunities throughout Alaska in both urban and rural settings.

Academic Requirements

Students enrolled in the PMH-NP Graduate Certificate program must make continuous progress toward completion of the certificate and remain in good standing with the School of Nursing (SON). A detailed schematic of the SON good standing policy can be found in the SON Graduate Handbook (<http://www.uaa.alaska.edu/schoolofnursing/studenthandbooks.cfm>). Noncompliance with the good standing policy and academic progress expectations will result in probation and possible dismissal from the program. To remain in good standing students must:

- Maintain professional and academic standards always.
- Earn a minimum 3.00 (B) in all required coursework.
- Maintain continuous enrollment each fall and spring semester until certificate is granted.

Graduation Requirements

- Satisfy the General University Requirements for Graduate Certificates. (p. 353)
- Complete the program requirements below.

Program Requirements

The program requirements are based on what type of nurse practitioner certification the individual already has; additional coursework may be required based on the transcript gap analysis that is done by the academic advisor.

Code	Title	Credits
NSG A670	Advanced Practice Psychiatric and Mental Health Nursing I	5
NSG A671	Advanced Practice Psychiatric and Mental Health Nursing II	5
NSG A672	Advanced Practice Psychiatric and Mental Health Nursing III	5
NSG A673	Advanced Practice Psychiatric and Mental Health Nursing IV	5

NSG A611	Psychopharmacology for Advanced Nursing	3
Total Credits		23

A total of 23 credits is required for the certificate.*

* *Students need to have had an advanced pharmacology, pathophysiology and health assessment course in their original nursing master's program; if their program did not include some or all of these courses, they may need to be taken for the graduate certificate.*

Program Student Learning Outcomes

The graduate is prepared to:

- Engage in scholarly inquiry, including evaluation and application of evidence-based research to advanced nursing practice or nursing leadership.
- Practice in a manner that incorporates ethical, legal, and professional standards for advanced nursing practice or nursing leadership.
- Collaborate across disciplines and in partnership with communities, groups, families and individuals through culturally sensitive practice.
- Demonstrate competence and caring in the professional nurse role to serve as a leader, provider, and educator in the health care system.
- Articulate a plan for self-directed, lifelong learning and professional development.

Doctor of Nursing Practice in Nursing Science

Graduate studies at the doctoral level place primary emphasis upon advanced professional nursing practice, theory, research and leadership roles in advancing health care delivery systems and application of research into practice. The Doctor of Nursing Practice (DNP) represents the highest degree in nursing practice. The UAA School of Nursing DNP program is accredited by the Commission on Collegiate Nursing Education (CCNE), One Dupont Circle, NW, Suite 530, Washington, DC 20036, (202) 887-6791.

There are two pathways for the DNP degree.

- The post-baccalaureate DNP pathway is for registered nurses who have completed a Bachelor of Science in Nursing degree. Students will develop advanced practice primary care skills for individuals across the life-span as a Family Nurse Practitioner (FNP) or as a Psychiatric-Mental Health Nurse Practitioner (PMH-NP). In addition, they will expand their knowledge and skills to interpret research, apply best practices, and incorporate clinical knowledge and leadership skills to influence health care systems and policy. In fall 2019, the post-baccalaureate DNP pathway will replace the current master's degree nurse practitioner options (FNP and PMH-NP). Contact a DNP advisor for details.

- The post-masters DNP pathway is for individuals who are master's prepared Advanced Practice Registered Nurses (APRNs) and are certified nurse practitioners (NPs), certified nurse midwives (CNMs), or certified registered nurse anesthetists (CRNAs). Since students in this pathway are already educated in a population focused advanced practice role, the program is designed to expand their knowledge and skills to interpret research, apply best practices, and incorporate clinical knowledge and leadership skills to influence health care systems and policy.

Part-Time/Full-Time Study

The post-baccalaureate DNP pathway is designed to be completed in 4 years (12 trimesters) of part-time study. The post-master's DNP pathway is designed to be completed in two years (6 trimesters) of part-time study. Students who are not formally admitted will be allowed to register for up to 9-credits of core classes on a space-available basis and with instructor permission. For information on full-time options, please contact the School of Nursing DNP advisor.

Scheduling of Courses

Non-clinical graduate nursing courses are offered online. Online courses may be synchronous (entire class participating at the same time) or asynchronous. Clinical courses require short time blocks on the UAA campus. It is possible for students who reside outside of Anchorage to take advantage of the opportunity to pursue graduate study at UAA. All students will have the opportunity to take advantage of clinical learning opportunities throughout the state, in both urban and rural settings.

Admission Requirements

Satisfy the **Admissions Requirements for Graduate Degrees** (p. 50).

School of Nursing Admission Deadlines

Information on admission deadlines can be found on the **SON website**. The post Master's Doctor of Nursing Practice (DNP) program reviews all candidates once application is complete. All applicants may take up to 9 credits of core courses, on a space available basis and with faculty permission, while waiting for their application to be processed.

School of Nursing Admission Requirements

To be eligible for the post Master's DNP program the student must submit documentation of the following:

- Earned graduate degree in nursing from an advanced practice registered nurse (APRN) program accredited by the Commission on Collegiate Nursing Education (CCNE) or the Accreditation Commission for Education in Nursing (ACEN).
- Registered professional nurse license in the state of Alaska. License must remain active and unencumbered while in the School of Nursing (SON) graduate program. There are different reasons for a license to be encumbered and some may not preclude admission to the program. Students with encumbered licenses should meet with the graduate chair to determine program eligibility.
- Active unencumbered APRN license. The license must remain active and unencumbered while in the SON graduate program.
- Engaged in practice as an advanced practice registered nurse.

- Meet with the faculty advisor and have an approved plan of study based on a gap analysis. A gap analysis is a process of reviewing transcripts to determine if additional courses might be needed or if some courses can be waived. The gap analysis form can be found in the **SON DNP Handbook** (<http://www.uaa.alaska.edu/schoolofnursing>) (see **SON website** for advisor contact information).

School of Nursing Admission Process

The UAA School of Nursing application process can be found on the **SON website**.

Additional School of Nursing Requirements

Once accepted to the Post Master's DNP program, students will receive instructions for submission of the following requirements*:

- Documentation of continuous current certification in cardiopulmonary resuscitation (CPR) for adults, infants, and children;
- Evidence of satisfactory health status, including immunity to chicken pox, rubella, rubeola, and hepatitis A and B (by titer), documentation of Tdap (tetanus, diphtheria, pertussis) immunization within the past 10 years, annual PPD skin test or health examination indicating freedom from active tuberculosis, documentation of an annual HIV test (results not required);
- Results of a SON-sanctioned national-level criminal background check.

Footnotes *The above requirements may change based on the demands of clinical facilities. Please check with the SON for the most recent list of requirements.

Students are required to provide their own transportation to clinical sites. They are also responsible for their portion of the cost of audio conferencing. Students must have access to a personal computer and reasonable Internet connectivity. Prior to entry into the nursing program, students are expected to have graduate-level writing and American Psychological Association (APA) referencing skills, as well as basic computer and typing skills, for example:

- Word processing.
- Sending and receiving e-mail with attachments.
- Accessing and navigating the Internet/World Wide Web.
- Basic understanding of hardware, software and operating systems.

Academic Requirements

Students enrolled in the DNP program must maintain continuous enrollment and remain in good standing with the SON. A detailed schematic of the SON good standing policy can be found in the **SON DNP Handbook** (<http://www.uaa.alaska.edu/schoolofnursing>). Noncompliance with the good standing policy and academic expectations will result in probation and possible dismissal from the program. In order to remain in good standing students must:

- Maintain professional and academic standards at all times.
- Maintain continuous enrollment each trimester until degree is earned.

- Earn a minimum 3.00 (B) in all required coursework.
- Complete NSG A696A, NSG A696B and NSG A696C no later than three sequential semesters after completion of all other required coursework.

Graduation Requirements

- Satisfy the **General University Requirements for Graduate Degrees** (p. 346).
- Complete the program requirements below.

Program Requirements

Code	Title	Credits
Complete the following courses:		
NSG A615	Health Services Organization and Finance	4
NSG A601A	Genetics and Genomics in Advanced Pathophysiology	1
NSG A610A	Pharmacology for Primary Care: Special Topics	1
NSG A613	Advanced Practice Informatics *	2
NSG A614	Advanced Practice Ethics and Law *	2
NSG A618A	Advanced Nursing Leadership *	2
NSG A619A	Health Economics *	2
NSG A628	Practice Inquiry II: Design and Methods	3
NSG A629	Practice Inquiry III: Proposal Development	2
NSG A634	Epidemiology for Advanced Practice *	2
NSG A683	Clinical Immersion **	3
NSG A684	Clinical Concentration **	4
NSG A696A	Practice Inquiry IV A: Capstone Project	2
NSG A696B	Practice Inquiry IV B: Capstone Project **	2
NSG A696C	Practice Inquiry IV C: Capstone Project	2
Advisor-approved elective		3
Total Credits		37

* Core courses

** The post-MS DNP program has a total of 37 credits. A student may petition to waive up to 7 credits based on an evaluation of their MS transcripts. A DNP requires 1,000 clinical hours; up to 700 hours may be waived based on documentation of supervised clinical hours earned in the master's degree program.

It is highly recommended that students complete the practice inquiry series (NSG A628, NSG A629, and NSG A696A, NSG A696B and NSG A696C) in sequential order. Students wishing to take NSG A696A earlier in the sequence may do so with instructor/advisor approval.

Capstone: Project Dissemination

The DNP program culminates in successful completion of a scholarly capstone project. The project must focus on an issue related to improving patient outcomes and it must demonstrate synthesis of the student's coursework and clinical practice application. Students who are unable to complete their capstone after completing NSG A696C may be required to take additional coursework. Specific requirements for additional coursework will be determined by the graduate program chairperson, the DNP coordinator and the capstone project chair.

Program Student Learning Outcomes

Students graduating with a Doctor of Nursing Practice in Nursing Science will be able to:

- Demonstrate enhanced professional skills in advanced practice nursing using an ethical, evidence-based approach to promote healthy communities
- Apply clinical inquiry using a culturally sensitive, evidence-based approach to adapt practice and change health outcomes
- Act in expanded leadership roles to influence local, statewide and national health care policy and delivery systems serving unique, diverse and underserved populations

Social Work

Gordon Hartlieb Hall (GHH), Room 106, (907) 786-6900
www.uaa.alaska.edu/socialwork (<http://www.uaa.alaska.edu/socialwork>)

Programs of Study

Master of Social Work

- Master of Social Work (p. 418)

Master of Social Work/Master of Public Health

- MSW/MPH Dual Degree (p. 406)

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Master of Social Work

The mission of the UAA Master of Social Work (MSW) program is to prepare advanced generalist social workers who address health and social issues in Alaska. Alaska's unique and rich multicultural populations, geographic remoteness, and frontier status allow the real potential for skilled social work professionals to make a profound impact on social, economic and environmental injustice in our state. The MSW program is accredited by the Council on Social Work Education (CSWE). The program is reviewed by CSWE for reaffirmation on a regular basis.

The MSW program is structured to allow students to participate in part-time or full-time graduate studies plans requiring from one to four years of study. The MSW program is an advanced generalist MSW program, and the curriculum has two components: the generalist curriculum and the advanced generalist curriculum. MSW students complete social work field practicum placements in the generalist curriculum and in the advanced generalist curriculum.

The generalist curriculum is composed of 31 semester credits and is completed in the first year of the full-time program, and the first two years of the part-time program. Students with a BSW degree who are admitted with advanced standing are waived from the courses in the generalist curriculum, with the exception of SWK 624 Research Methods.

The advanced generalist curriculum is composed of 31 credits and is completed in the second year of the full-time program and the second two years of the part-time program. The advanced generalist curriculum is the curriculum completed by students with a BSW degree who are admitted with advanced standing. All students must successfully complete all courses in the advanced generalist curriculum.

The MSW program does not grant social work course credit for life experience or previous work experience.

Admission Requirements

- Satisfy the Admission Requirements for Graduate Degrees (p. 50).
- The application deadline is January 15. Applications are accepted and reviewed once a year.
- Applications must be submitted online. Paper applications will not be accepted.
- The MSW program reserves the right to request additional materials and/or interviews pertaining to program admission. Admission to the MSW program is based on the professional judgment of the MSW Admissions Committee. Only applicants eligible to be licensed as a social worker in the state of Alaska will be admitted to the MSW program. Please contact the School of Social Work for further information.

Additional Criteria for Admission to the Full MSW Program:

- Two prerequisite courses (completed with a grade of “C” or better):
 - Human biology (UAA courses that satisfy this requirement include: BIOL A100; BIOL A102; BIOL A111 or BIOL A112; BIOL A113 or BIOL A114)
 - Statistics (UAA courses that satisfy this requirement include: STAT A200, STAT A253, PSY A260, SOC A462)

Additional Criteria for Admission to the MSW Program with Advanced Standing: Applicants who do not meet the criteria for advanced standing may apply to the full MSW program.

- Bachelor of Social Work degree completed within the past five years from a baccalaureate social work program accredited by the Council on Social Work Education, recognized through its International Social Work Degree Recognition and Evaluation Services, or covered under a memorandum of understanding with international social work accreditors.
- 3.50 GPA in BSW program core courses (course work in human behavior, policy, research, practice, and practicum).
- Grade of “A” or equivalent in each field placement course.
- Two prerequisite courses (completed with a grade of “C” or better):
 - Human biology (UAA courses that satisfy this requirement include: BIOL A100; BIOL A102; BIOL A111 or BIOL A112; BIOL A113 or BIOL A114)
 - Statistics (UAA courses that satisfy this requirement include: STAT A200, STAT A253, PSY A260, SOC A462)

Academic Requirements

To maintain satisfactory progress toward the degree, a student in the MSW program is expected to achieve a GPA of 3.00 or better on a 4.00 scale with no individual course grade lower than a C and to adhere to the Code of Ethics of the National Association of Social Workers. Students must earn a grade of B or better in all field practicum courses: SWK A639, SWK A644, SWK A645, SWK A646 and SWK A647.

Candidacy for a Master of Social Work

1. Refer to Advancement to Candidacy (p. 346) criteria.
2. Successfully complete MSW comprehensive examination, which is completed in SWK A635.

Graduation Requirements

- Satisfy the General University Requirements for Graduate Degrees (p. 346).
- Successfully complete the program requirements below.

Program Requirements

Students admitted to the program on a part-time basis take from 2 to 7 credits each semester, including summer.

Students admitted to the program on a full-time basis may take up to 7 credits each summer, and 12 to 16 credits in fall and spring semesters.

Generalist Curriculum: Complete, test out of or waive the following required courses*:

Code	Title	Credits
SWK A607	Social Welfare Policy and Services	3
SWK A624	Foundation Research Methods	4
SWK A630	Practice I: Individuals	3
SWK A631	Introduction to Social Work Practice	3
SWK A632	Practice II: Families and Groups	3
SWK A636	Practice III: Organizations and Communities	3
SWK A642	Human Behavior in the Social Environment	3
SWK A643	Human Diversity in Social Work Practice	3
SWK A644	Social Work Practicum I	3
SWK A645	Social Work Practicum II	3

* *Advanced standing students are required to complete SWK A624 Foundation Research Methods, but they are waived from taking SWK A607, SWK A630, SWK A631, SWK A632, SWK A636, SWK A642, SWK A643, SWK A644 and SWK A645.*

Advanced Generalist Curriculum: All MSW students are required to complete the courses in the advanced generalist curriculum and two social work-related electives at the 600-level with advisor approval.

Code	Title	Credits
SWK A608	Social Policy for Advanced Generalist Practice	3
SWK/HS A628	Program Evaluation	3
SWK A629	Advanced Generalist Practice I: Individuals	3
SWK A633	Advanced Generalist Practice II: Families and Groups	3
SWK A634	Advanced Generalist Practice III: Organizations and Communities	3
SWK A635	Transformational Leadership Capstone	3
SWK A638	Practice Evaluation Lab	1
SWK A646	Advanced Generalist Practicum I	3
SWK A647	Advanced Generalist Practicum II	3

A minimum of 35 credits and a maximum of 62 credits is required for the degree.

Licensure and/or Certification

Graduates completing the Master of Social Work program are eligible to sit for the Licensed Master Social Worker (LMSW) examination within the state of Alaska immediately after graduation. They are also eligible to sit for the Licensed Clinical Social Worker (LCSW) examination within the state of Alaska after completion of requisite practice hours and supervision of those practice hours.

Students planning to seek a professional license or certificate in a state other than Alaska are required to contact the UAA offering department

before enrolling to determine if the program meets the licensing/certification requirements of the state in which they wish to practice.

Program Student Learning Outcomes

The Master of Social Work program prepares advanced generalist social workers who:

- Are leaders who assume multiple practice roles to address health and social issues in Alaska.
- Engage in practice consistent with the values and ethics of the social work profession.
- Demonstrate attunement, sensitivity and respect for people from diverse backgrounds.
- Intervene differentially with, and on behalf of, populations at risk or who experience discrimination, economic deprivation, and/or oppression.
- Develop and conduct research to inform practice.
- Develop and evaluate social policies that promote social, economic and environmental justice.
- Engage in planned change using theory and evidence-based practice processes to provide competent and effective services across system sizes.
- Integrate contextual knowledge into the development, implementation and evaluation of social work services in Alaska.

Dual Degree, Master of Social Work/Master of Public Health

The Master of Social Work/Master of Public Health (MSW/MPH) dual degree provides academic training in order to maximize the impact of both public health and social work practices. This dual degree develops expertise at the nexus of public health and social work. The goal of this program is to train leaders who have the skills and competencies to address many of the social and public health problems facing the state of Alaska, this nation and the world.

An advantage of the dual MSW/MPH option is that by mutual agreement between the two programs, some courses count toward graduation requirements in both programs. Thus the time to complete both degrees and the total number of credits required has been reduced. The time to complete both degrees for a full-time student is approximately three years (nine semesters). If both degrees were pursued sequentially, the minimum time to the degrees is four years (12 semesters). Similarly, the total number of credits to acquire the dual degree is fewer than 80; the total number of credits for sequentially obtaining both degrees is 105.

Admission Requirements

- Satisfy the Admission Requirements for Graduate Degrees (p. 50).
- Students must apply separately and meet the admission requirements of both the MSW (p. 418) and MPH (p. 404) programs. See those programs for specific requirements.

Advising

Each student will have two academic advisors, one for each degree program. Students will have two graduate studies plans (GSPs), one for each degree program. The GSPs will vary based on full or part-time status and the semester of entry into the MSW or MPH program.

Academic Requirements

To maintain satisfactory academic progress toward the dual degrees, a student is expected to be in good standing in both academic programs. See Graduate Degree Policies (p. 349) for additional requirements.

Graduation Requirements

- Satisfy the General University Requirements for Graduate Degrees (p. 346).
- Complete the program requirements below.

Each degree will be awarded when the requirements for graduation for that degree have been met.

Program Requirements

Code	Title	Credits
Complete the following MPH core courses:		
HS A605	Public Health and Society	3
HS A610	Environmental and Occupational Health	3
HS A615	Health Services Administration	3
HS A624	Circumpolar Health Issues	3
HS A625	Biostatistics for Health Professionals	3
HS A626	Principles of Epidemiology	3
HS/SWK A628	Program Evaluation	3
HS A629	Public Health Research Tools and Methods	4
HS A630	Public Health Emergencies and Disasters	3
HS A698 or HS A699	MPH Practicum-Project MPH Practicum-Thesis	5
Total Credits		33

Code	Title	Credits
Complete the following MSW core courses:		
SWK A607	Social Welfare Policy and Services	3
SWK A608	Social Policy for Advanced Generalist Practice	3
SWK A630	Practice I: Individuals	3
SWK A631	Introduction to Social Work Practice	3
SWK A632	Practice II: Families and Groups	3
SWK A633	Advanced Generalist Practice II: Families and Groups	3
SWK A634	Advanced Generalist Practice III: Organizations and Communities	3

SWK A635	Transformational Leadership Capstone	3
SWK A636	Practice III: Organizations and Communities	3
SWK A642	Human Behavior in the Social Environment	3
SWK A643	Human Diversity in Social Work Practice	3
SWK A644	Social Work Practicum I	3
SWK A645	Social Work Practicum II	3
SWK A646	Advanced Generalist Practicum I	3
SWK A647	Advanced Generalist Practicum II	3
Total Credits		45

A minimum of 77 credits is required for the Master of Social Work and Master of Public Health dual degree.

Community & Technical College

Admission to this program is currently suspended. Please contact the Community & Technical College for assistance at (907) 786-6400. www.uaa.alaska.edu/ctc (<http://www.uaa.alaska.edu/ctc>)

Career and Technical Education

These programs have been suspended. Contact the Community & Technical College at (907) 786-6400 for more information.

Programs of Study

Master of Science

- MS in Career and Technical Education (p. 421)

Master of Science in Career and Technical Education

Admission to this program is currently suspended. Contact the Community & Technical College at (907) 786-6400 for more information.

Cooperative Doctoral Programs

Professional Doctorate in Occupational Therapy (OTD)

Creighton University/UAA Occupational Therapy Program

The Creighton University-UAA occupational therapy program is a hybrid format professional program that leads to the Occupational Therapy Doctorate (OTD). Students take classes in both traditional and distance formats with labs being held on the UAA campus.

Up to 12 students per year are accepted to this three-and-a-half year, full-time program. To be eligible for the program, applicants must have a bachelor's degree and meet the required prerequisites. After successful completion of the program, students are eligible to sit for the

National Board for Certification in Occupational Therapy examination and to apply for licensure.

Creighton University is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools. The program in occupational therapy is accredited by the Accreditation Council for Occupational Therapy Education of the American Occupational Therapy Association, Inc.

For information on prerequisites, curriculum and application procedures, please visit the program website (<https://www.uaa.alaska.edu/academics/college-of-health/departments/occupational-therapy>).

UAA/ISU Doctor of Pharmacy Program (PharmD)

*Professional Studies Building (PSB), (907) 786-6553
www.isu.edu/pharmacy*

Each year, 15 Alaskan students begin their Doctor of Pharmacy (PharmD) studies in a joint program by University of Alaska Anchorage (UAA) and the Idaho State University (ISU) College of Pharmacy. During the first three years of the program, Alaska's Doctor of Pharmacy students take live classes on the UAA campus as part of a program wide cohort connected by synchronous distance-learning technology across three delivery sites: Pocatello and Meridian, Idaho, and Anchorage, Alaska. The fourth year of the program consists of seven six-week blocks of clinical clerkship experiences called Advanced Pharmacy Practice Experiences. The entire four-year program, including clerkships, is completed in Alaska.

For additional program details, contact the UAA campus program office at (907) 786-6553 or visit www.isu.edu/pharmacy (<https://www.isu.edu/pharmacy>).

Eligibility

Alaska residents are given preference in applying for admission to the Anchorage site. Applicants must meet common requirements established by the ISU College of Pharmacy, including prerequisites in biology, chemistry, physics and social sciences. Detailed eligibility information is available on the ISU College of Pharmacy website (<https://www.isu.edu/pharmacy>).

Admissions

Applications are submitted through the ISU College of Pharmacy website (www.isu.edu/pharmacy (<https://www.isu.edu/pharmacy/prospective-students/prospective---pharmd/application>)). All applications received by ISU from Alaskan residents will be considered for the UAA/ISU program in Anchorage, Alaska. Complete application information including details about the selection procedure can be found on the ISU website.

Accreditation

Idaho State University is fully accredited by the Northwest Commission on Colleges and Universities (NWCCU). The pharmacy program, accredited by the Accreditation Council for Pharmacy Education

(ACPE), is a member of the American Association of Colleges of Pharmacy (AACP).

Faculty

Thomas Wadsworth, PharmD, BCPS - Assistant Dean Alaska Programs, ISU College of Pharmacy, wadsthom@isu.edu

University of Alaska Fairbanks (UAF)

Students may use specific courses from other University of Alaska campuses to satisfy requirements of cooperative graduate programs offered by UAF. The cooperative program must include an approved UAF graduate studies plan (GSP). The student must complete a minimum of 12 semester resident credits at UAF.

The following guidelines are for collaborative PhD programs offered by UAF, where students are enrolled at other UA campuses. Some degree programs have different requirements which are included in specific program descriptions in the graduate degree program section of the UAF catalog. The guidelines described here apply only to programs that have not established different requirements.

1. At least four faculty members shall serve on the graduate advisory committee for each PhD student. At least two committee members shall be UAF faculty. When the student is enrolled at UAA, the committee shall be chaired or co-chaired by a UAA faculty member.
2. The graduate advisory committee and its chair and/or co-chairs must be approved by the UAF program director and the dean of the UAF Graduate School.
3. UAF rules and regulations on graduate studies shall apply to all UAF graduate students, including those concurrently enrolled at UAA.
4. The graduate advisory committee must meet at least once a year to update the GSP and to review the student's progress toward the degree. The annual progress report must be signed by all committee members and submitted to the dean of the UAF Graduate School.
5. The student's advisory committee will administer the PhD comprehensive exam for each student.
6. The PhD dissertation defense is conducted on the student's home campus and can be done via distance technologies.

WWAMI School of Medical Education

Health Sciences Building (HSB), Room 301, (907) 786-4789
www.alaska.edu/wwami (<http://www.uaa.alaska.edu/wwami>)

Each year, 20 certified Alaska residents begin their medical education in a collaborative medical school that operates among the campuses of five northwestern states -- Washington, Wyoming, Alaska, Montana and Idaho (WWAMI) -- becoming part of a class of more than 200 students programwide. Alaska's WWAMI medical students will take classes at UAA for the foundations phase, the equivalent of the first and second years of medical school. The six-week blocks of clinical experiences, called clerkships, that occupy the third and fourth years can be taken in any of the five states, and an Alaska track allows nearly all of these to be completed in Alaska.

Eligibility

Alaska residents are eligible to apply for admission. Detailed eligibility information (<https://www.uaa.alaska.edu/academics/college-of-health/departments/wwami/ak-wwami-eligibility.cshtml>) is available on the WWAMI website (<https://www.uaa.alaska.edu/academics/college-of-health/departments/wwami>). Applicants must meet common requirements established by University of Washington School of Medicine (UWSOM). These requirements include prerequisites in biology, chemistry, physics and social sciences and submission of scores from the Medical College Admission Test (MCAT). Program details can be found on the UWMedicine website (<http://www.uwmedicine.org>) or by contacting the WWAMI office.

Admissions

Applications are accepted through the American Medical College Application Service (AMCAS). WWAMI applications are submitted to the UWSOM. All applications received by UWSOM from Alaska residents will be considered for the WWAMI program in Alaska. Complete application information, including details about the selection procedure, can be found on the UWMedicine website (<http://www.uwmedicine.org>).

Faculty

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Interdisciplinary Studies Degree

A student who has received a baccalaureate degree from a regionally accredited institution and whose credentials indicate the ability to pursue graduate work may develop an interdisciplinary studies major. The proposed program must differ significantly from and may not substitute for an existing UAA graduate degree program. The student may select no more than one half of the program credits from one existing graduate degree program, and courses must come from two or more disciplines (i.e., subjects). All interdisciplinary students must be "homed" in an existing graduate program.

In addition to the General University Requirements for Graduate Degrees (p. 346), students must comply with the following procedures:

1. The student submits a UAA Graduate Application for Admission (as an interdisciplinary studies major) with the appropriate fee to the Office of Admissions. This application will be reviewed by the Graduate School for determination of acceptance to graduate study, contingent on items 2-5 below.
2. The student invites a faculty member to chair their graduate studies committee and to serve as the student's graduate advisor. The student must be "homed" in an existing graduate degree program and the chair shall normally be a full-time faculty member from that graduate degree program. The chair must agree to serve and must be approved by the Graduate School dean or designee. Faculty members may be co-chairs if they are from non-graduate programs.
3. The student proposes a graduate studies committee of at least three faculty members (including the chair) from the appropriate academic disciplines. The committee members and chair must represent all concentration areas of 9 credits or more. The committee members must agree to serve and be approved by the Graduate School dean or designee by submitting an Appointment of Committee Form. Faculty from non-graduate programs may participate as co-chairs or committee members.
4. The student develops an interdisciplinary proposal, including a paper graduate studies plan (GSP) specifying the degree (MA/MS) and title or concentration. In developing this proposal, the student should review all graduate degree policies and procedures. To receive an interdisciplinary studies master's degree from UAA, the student must incorporate into his or her proposal all General University Requirements for Graduate Degrees and any college requirements applicable. No more than 6 thesis credits should be included. The graduate committee may require a master's thesis, research project or capstone.
5. The student presents the proposed GSP along with the master's thesis, research project or capstone proposal to the committee and chair for preliminary review and approval. If the committee and chair support the GSP and research proposal, it will be forwarded to the Graduate School dean or designee for approval in consultation with the affected graduate programs.
6. Students work with their advisors and graduate committees to ensure that satisfactory progress is made toward completing degree requirements.
7. The student must complete all requirements established in the official interdisciplinary GSP, and must pass a written and/or oral comprehensive examination, an evaluation of independent scholarship, and/or a project or thesis defense or similar final evaluation as established by the graduate program. The examination, evaluation or defense must be approved by all graduate committee members as passing the requirement and by the dean of the Graduate School or designee. All theses and projects must have final approval by the dean or designee of the Graduate School.
8. During the semester of the project or thesis defense or similar final evaluation, the student must apply for graduation in a timely fashion. The diploma will indicate that it is an interdisciplinary degree, as well as the applicable subjects/concentration.
9. All theses and projects must meet formatting requirements as established by the Graduate School.

Course Descriptions

Accounting (ACCT)

Courses

ACCT A101 Principles of Financial Accounting I 3 Credits

First semester introductory financial accounting. Emphasizes procedures for recording, analyzing and summarizing accounting transactions. Includes discussion of the following asset categories: cash, accounts receivable and inventory. Taught from the perspective of the accountant or bookkeeper who is responsible for recording accounting transactions.

Special Note: ACCT A101 and ACCT A102 will satisfy requirement for ACCT A201. AAS Accounting majors must take ACCT A101 and ACCT A102.

Registration Restrictions: UAA-approved mathematics placement test scores may be used in lieu of prerequisite.

Prerequisites: MATH A055 with a minimum grade of C or MATH A060 with a minimum grade of C or MATH A105 with a minimum grade of C or MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C or MATH A155 with a minimum grade of C or MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C or MATH A252 with a minimum grade of C or MATH A253 with a minimum grade of C.

ACCT A102 Principles of Financial Accounting II 3 Credits

Second semester introductory financial accounting. Emphasizes procedures for recording, analyzing, and summarizing accounting transactions dealing with long-term assets, current and long-term liabilities, as well as stockholder and partnership equity transactions, and the statement of cash flows. Taught from the perspective of the accountant/bookkeeper who is responsible for recording accounting transactions.

Special Note: ACCT A101 and ACCT A102 will satisfy requirement for ACCT A201. AAS Accounting majors must take ACCT A101 and ACCT A102.

Prerequisites: ACCT A101 with a minimum grade of C.

ACCT A120 Bookkeeping for Business I 3 Credits

Basic concepts and procedures of practical bookkeeping. Fundamental principles and practices necessary to record and report financial data in a service and merchandising business for manual systems and computerized systems.

Special Note: May be offered as either classroom or open-entry, individualized course.

ACCT A201 Principles of Financial Accounting 3 Credits

Introduction to financial accounting concepts and principles.

Emphasizes the recognition and recording of financial information, the creation and understanding of financial statements, and the role accounting information takes in business and society.

Special Note: ACCT A101 and ACCT A102 will satisfy the requirement for ACCT A201. AAS Accounting majors must take ACCT A101 and ACCT A102.

Registration Restrictions: UAA-approved mathematics placement test scores may be used in lieu of prerequisites.

Prerequisites: MATH A105 with a minimum grade of C or MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C.

ACCT A202 Principles of Managerial Accounting 3 Credits

Study of the generation and analysis of accounting information and its use by managers as they engage in planning, control and decision-making activities in business and non-business organizations. Topics include product costing, cost-volume-profit analysis, profit planning, variance analysis, relevant costs for decision making and capital budgeting decisions.

Prerequisites: (ACCT A101 with a minimum grade of C and ACCT A102 with a minimum grade of C) or ACCT A201 with a minimum grade of C.

ACCT A210 Income Tax Preparation 3 Credits

Preparation of individual income tax returns, manually and computerized (using the latest in tax preparation software). Tax research and tax planning with emphasis on primary and administrative sources of income tax law. Emphasis is on the sources and interpretation of the tax laws and principles as well as how they apply to individuals.

Prerequisites: ((ACCT A101 with a minimum grade of C and ACCT A102 with a minimum grade of C) or ACCT A201 with a minimum grade of C) and CIS A110 with a minimum grade of C.

ACCT A216 Accounting Information Systems I 3 Credits

Studies the role and importance of the Accounting Information System (AIS) within an organization, including an in-depth examination of the accounting cycle from transaction initiation through financial statement preparation and analysis. Includes manual practice sets for hands-on application. Exposure to systems documentation, internal controls, fraud process, and classic accounting frauds and scandals.

Prerequisites: (ACCT A101 with a minimum grade of C and ACCT A102 with a minimum grade of C) or ACCT A201 with a minimum grade of C.

ACCT A222 Introduction to Computerized Accounting 3 Credits

Introduction to processing accounting information using commercial accounting software. Comparison of manual to computerized recording and processing of accounting transactions. Includes maintenance of chart of accounts and master files; processing sales, receivables, cash receipts, purchases, payables, and cash payments. Preparation of financial statements and other reports in computerized software systems and spreadsheet applications.

Prerequisites: ((ACCT A101 with a minimum grade of C and ACCT A102 with a minimum grade of C) or ACCT A201 with a minimum grade of C) and CIS A110 with a minimum grade of C.

ACCT A225 Payroll Accounting 3 Credits

Introduces students to the federal and state laws and regulations that affect payroll and employment practices. Topics covered include calculation of wages, withholding taxes, health, retirement, and other voluntary deductions and preparation of payroll tax reports. Also includes recording and posting payroll information to accounting records manually and using computerized software.

Prerequisites: ((ACCT A101 with a minimum grade of C and ACCT A102 with a minimum grade of C) or ACCT A201 with a minimum grade of C) and CIS A110 with a minimum grade of C.

ACCT A230 Workpaper Preparation and Presentation 3 Credits

Emphasizes preparation and analysis of workpapers to support year-end corporate financial statements. Includes an in-depth analysis of major balance sheet accounts and a study of financial statement presentation formats and requirements.

Prerequisites: ACCT A101 with a minimum grade of C and ACCT A102 with a minimum grade of C and ACCT A222 with a minimum grade of C and CIS A110 with a minimum grade of C.

ACCT A295 Entry-Level Accounting Internship 3 Credits

Work experience in an approved bookkeeping or clerical position with supervision and training in various phases of accounting.

Special Note: May be repeated for credit, but only 3 credits will apply to degree requirements.

Registration Restrictions: Permission of College of Business and Public Policy accounting faculty internship coordinator; cumulative GPA of 2.75 or higher; must be an AAS Accounting major.

Prerequisites: ACCT A101 with a minimum grade of C and ACCT A102 with a minimum grade of C and WRTG A111 with a minimum grade of C and (COMM A111 with a minimum grade of C or COMM A235 with a minimum grade of C or COMM A237 with a minimum grade of C or COMM A241 with a minimum grade of C).

ACCT A301 Intermediate Accounting I 3 Credits

In-depth study of the accounting sequence, principles and rules governing financial statements and balance sheet accounts including cash; receivables; inventory; property, plant and equipment; and intangibles.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: ACCT A202 with a minimum grade of C and ACCT A216 with a minimum grade of C.

ACCT A302 Intermediate Accounting II 3 Credits

A continuation of the study of intermediate accounting, including the principles governing financial reporting of investments, liabilities, stockholders' equity, revenues and cash flows.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: ACCT A301 with a minimum grade of C.

ACCT A316 Accounting Information Systems II 3 Credits

Studies the Accounting Information System (AIS) as an integral component of an enterprise information system. Emphasizes data modeling and database design of accounting systems. Covers internal controls and systems documentation.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: ACCT A202 with a minimum grade of C and ACCT A216 with a minimum grade of C and (CIS A280 with a minimum grade of C or CIS A305 with a minimum grade of C).

ACCT A342 Managerial Cost Accounting 3 Credits

Examines the nature, objectives and procedures of cost management as applied to product and service costing, decision-making, cost planning, and control systems.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: ACCT A202 with a minimum grade of C.

ACCT A401 Advanced Accounting 3 Credits

The study of accounting for expanded business entities. Topics include: corporate purchase consolidations; partnership formation and dissolution; and foreign currency transactions, translations, and hedges.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: ACCT A302 with a minimum grade of C.

ACCT A409 Individual Income Tax 3 Credits

Studies federal income tax law as it applies to individuals, sole proprietors and property transactions. Emphasizes application, theory, research and tax planning.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: ACCT A301 with a minimum grade of C.

ACCT A410 Corporate and Partnership Income Tax 3 Credits

Studies federal income tax law as it applies to partnerships, C-corporations and S-corporations. Emphasizes application, theory, research and tax planning.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: ACCT A302 with a minimum grade of C.

ACCT A420 Fraud Examination 3 Credits

Provides an overview of the nature of fraud and its impact on individuals and businesses. Examines fraud detection, investigation and prevention techniques. Analyzes various types of fraud, including employee embezzlement, management fraud, investment scams, vendor fraud and customer fraud. Emphasizes the need for strong internal control systems, codes of ethics, and financial statement and analysis techniques.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: ACCT A301 with a minimum grade of C.

ACCT A422 Justice for Fraud Victims 3 Credits

Utilizes forensic accounting techniques to investigate actual fraud cases that are brought to the class by law enforcement.

Registration Restrictions: Instructor permission. College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: (ACCT A302 with a minimum grade of C and ACCT A316 with a minimum grade of C) or ACCT A420 with a minimum grade of C.

ACCT A430 Governmental and Not-for-Profit Accounting 3 Credits

Covers fund accounting and financial reporting for governmental and not-for-profit entities including state and local governments, the federal government, colleges and universities, and health care organizations.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: ACCT A301 with a minimum grade of C.

ACCT A452 Auditing 3 Credits

Studies professional standards applicable to independent auditor's examination of financial statements and related expression(s) of opinion.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing. Completion of all GER Tier 1 (basic college-level skills) courses.

Prerequisites: ACCT A302 with a minimum grade of C and ACCT A316 with a minimum grade of C.

Attributes: UAA Integrative Capstone GER.

ACCT A494B Financial Statement Analysis 3 Credits

Analyze financial statements with a focus on analytical tools required to assess the firm's performance and financial position. Topics include the concepts of quality earnings, valuation methods, and methods of forecasting.

Registration Restrictions: College of Business and Public Policy BBA majors must be admitted to upper-division standing.

Prerequisites: BA A325 with a minimum grade of C.

ACCT A495 Advanced Accounting Internship 3 Credits

Integrates classroom study with work experience in an approved accounting position with supervision and training in the public and/or private sectors.

Special Note: May not be used to satisfy upper-division Accounting elective requirement. May be repeated for credit but only 6 credits will apply to degree requirements.

Registration Restrictions: Must be admitted to the BBA Accounting program; permission of College of Business and Public Policy accounting faculty internship coordinator; upper division standing; cumulative GPA of 2.75 or higher; cumulative GPA 3.00 or higher in major.

Prerequisites: ACCT A301 with a minimum grade of C.

ACCT A601 Accounting Foundations for Executives 3 Credits

A traditional survey of accounting for the core requirement in the MBA program. Covers common financial and managerial topics with brief exposures to systems, auditing, non-profit, partnerships and joint ventures.

Registration Restrictions: Graduate standing

ACCT A650 Seminar in Executive Uses of Accounting 3 Credits

Examines the correct use and interpretation of accounting data at the executive and board of directors level. Discusses company goals, human behaviors associated with accounting choices, and the difficulties of establishing financial controls that produce fair and informative audits. Explores misconduct, financial mismanagement, shenanigans and ethical dilemmas in financial reporting. Also examines value creation, forecasting and performance evaluations.

Registration Restrictions: Admission to MBA program or permission of instructor.

Prerequisites: ACCT A601 with a minimum grade of C and BA A603 with a minimum grade of C.

ACCT A654 Ethics, Law and Corporate Governance 3 Credits

Introduces ethical reasoning, corporate law and corporate governance.

Topics covered include business ethics, agency problems, incentive and monitoring mechanisms, investor and creditor protection, board and ownership structures, shareholder activism, corporate takeovers, corporate social responsibility, and regulations.

Registration Restrictions: Admission to MBA program or instructor permission

Aerospace Science ROTC (AIRS)

Courses

AIRS A101 Foundations of the United States Air Force I 1 Credit

Introduces basic military concepts. Covers key events in US Air Force history, military customs and courtesies, ethics, and communication skills.

Corequisites: AIRS A150.

AIRS A102 Foundations of the United States Air Force II 1 Credit

Describes the organization structure of Air Force major commands and operational wings. Covers facilities and services available at Air Force installations. Introduces Air Force writing formats.

Corequisites: AIRS A150.

AIRS A150 US Air Force Leadership Laboratory 1 Credit

Provides practical leadership experience and military training to Air Force ROTC cadets. Includes field trips to different Air Force bases and requires weekly physical fitness training, marching and leadership exercises.

Special Note: This is a required course for Air Force ROTC students seeking an officer's commission. Students must be eligible for military service to take this course.

Registration Restrictions: Students must be enrolled in AFROTC academic classes unless they have completed all ROTC academic courses for program completion. Corequisites are AIRS A101 or AIRS A102 or AIRS A201 or AIRS A202 or AIRS A301 or AIRS A302 or AIRS A401 or AIRS A402.

AIRS A201 Evolution of Air and Space Power I 2 Credits

Examines the evolution of air and space combat technology, doctrine, historical context and practice from the first use of dirigibles to the development of Intercontinental Ballistic Missiles and long-range bombers in the early 1960s.

Corequisites: AIRS A150.

AIRS A202 Evolution of Air and Space Power II 2 Credits

Builds upon previous (AIRS A201) coursework and examines the evolution of air and space combat technology, doctrine, and practice from the early 1960s to the present.

Corequisites: AIRS A150.

AIRS A301 US Air Force Leadership and Management I 3 Credits

Analyzes leadership, management fundamentals, professional knowledge, Air Force personnel and evaluation systems, leadership ethics, and communication skills required of an Air Force junior officer.

Special Note: This is a mandatory course for students seeking an Air Force officer commission.

Registration Restrictions: Departmental approval

Corequisites: AIRS A150.

AIRS A302 US Air Force Leadership and Management II 3 Credits

Examines concepts of military professionalism and officership. Analyzes the application of military ethics to various combat and non-combat scenarios. Covers officer evaluation, promotion and assignment systems.

Special Note: This is a mandatory course for students seeking an Air Force officer commission.

Registration Restrictions: Departmental approval

Prerequisites: AIRS A301.

Corequisites: AIRS A150.

AIRS A401 National Security Affairs I 3 Credits

Analyzes the relationship of the military to society and the role of the Executive and Congressional branches in military affairs. Examines the capabilities of the US Air Force, Navy and Army. Outlines US national security goals, commitments, and issues in Europe and East Asia.

Special Note: This is a mandatory course for students seeking an Air Force officer commission.

Registration Restrictions: Departmental approval

Prerequisites: AIRS A302.

Corequisites: AIRS A150.

AIRS A402 National Security Affairs II/Prep for Active Duty 3 Credits

Outlines US national security goals, commitments and issues in the Middle East, Latin America and the former Soviet Union. Analyzes non-traditional military operations and covers various personnel, legal and leadership topics.

Special Note: This is a mandatory course for students seeking an Air Force officer commission.

Registration Restrictions: Departmental approval

Prerequisites: AIRS A401.

Corequisites: AIRS A150.

Agriculture (AGRI)

Courses

AGRI A138 Organic Gardening 1-3 Credits

Introduces organic methods and materials for ecological agriculture covering soil management, crop rotations, weed control, pest management, garden planning, planting, harvesting, storage, French intensive methods, and compost.

Air Traffic Control (ATC)

Courses

ATC A143 ATC Regulations 3 Credits

Introduces Federal Aviation Regulations governing the Air Traffic Control System and the role of air traffic control specialists within the federal system.

ATC A144 ATC Flight Procedures 3 Credits

Presents types of navigation aids and their operational characteristics. Introduces navigation tools and references, and their utilization.

Special Note: One hour in Flight Training Device required.

ATC A147 Pilot/Controller Techniques 3 Credits

Examines methods of airport operations, and aeronautical lighting and visual aids, including markings and signs. Includes discussion of techniques used by pilots and controllers including all aspects of radio communication.

Prerequisites: ATC A143.

ATC A241 Control Tower Operations 3 Credits

Explains operating techniques of ATC airport facilities in visual and instrument conditions. Includes operations of airport lighting systems, proper phraseology, separation requirements, control techniques and emergency actions.

Prerequisites: ATC A143 and ATC A147.

ATC A241L Control Tower Operations Lab 1 Credit

Employs hands-on time in the control tower simulator. Emphasizes real-life ATC situations to develop techniques for the manipulation of air traffic during taxi, takeoff, and landing.

Prerequisites: ATC A241 or concurrent enrollment.

ATC A242 ATC Terminal Radar Procedures 3 Credits

Explores RADAR theory fundamentals and systems operation in air traffic control. Examines procedures of instrument traffic control in the terminal radar environment.

Prerequisites: ATC A143 and ATC A144 and ATP A235.

ATC A242L ATC Terminal Radar Procedures Lab 1 Credit

Employs hands-on time in radar laboratory simulators to develop techniques for the separation, vectoring and speed control of air traffic in a terminal radar environment.

Prerequisites: ATC A242 or concurrent enrollment.

ATC A243 ATC Enroute Procedures 3 Credits

Explores procedures of instrument traffic control in RADAR and non-RADAR environments. Emphasizes longitudinal, vertical, and lateral separation of air traffic.

Prerequisites: ATC A242.

ATC A243L ATC Enroute Procedures Lab 1 Credit

Explores techniques of longitudinal, vertical, and lateral separation of air traffic using lab scenarios designed to develop routine problem solving processes to adapt the student controller to real-life ATC situations.

Prerequisites: ATC A243 or concurrent enrollment.

ATC A250 Comprehensive Air Traffic Control Overview 2 Credits

Integrates concepts from all previous air traffic control classes, and examines the relationship between course material and occupational application. Contrasts academic and vocational use of knowledge, and prepares students to apply knowledge in the vocational setting.

Prerequisites: ATC A241 with a minimum grade of C and ATC A242 with a minimum grade of C and ATC A243 with a minimum grade of C and ATP A235 with a minimum grade of C.

ATC A325 Tools for Weather Briefing 3 Credits

Covers the operation and assessment of observation from three major weather sensors (Doppler RADAR, Weather Satellites, and Automated Surface Observation System), as well as analysis of weather charts and messages. Focuses on determining the state of the atmosphere, formulating trends, and their cause and effect. Qualifying air traffic control majors may receive Weather Observer Certification upon successful completion of Federal Aviation Administration knowledge exams.

Prerequisites: ATP A235.

ATC A355 Integrated Radar Techniques 3 Credits

Contrasts different radar specialties, including tracon, en route, and military. Examines relationship between facilities and focuses on potential problems where responsibilities overlap. Compares military and civilian traffic techniques, and dynamics of adapting to changing flow control standards.

Prerequisites: ATC A242 with a minimum grade of C and ATC A242L with a minimum grade of C and ATC A243 with a minimum grade of C and ATC A243L with a minimum grade of C.

ATC A440 Facility Operation and Administration 3 Credits

Emphasizes effective operation and administration of air traffic service facilities and conflict resolution between the FAA and labor unions. Evaluates current issues and events, and their potential impact on the National Airspace System.

Registration Restrictions: Sophomore standing or above

Prerequisites: BA A361 and BA A461.

Alaska Native Studies (AKNS)

Courses

AKNS A101 Alaska Native Languages I 4 Credits

Introductory course to a selected Alaska Native language for beginners with no, or little, prior knowledge of the specific language. Aural/oral skills and other communicative approaches used. Emphasis is on everyday vocabulary, structure, and phonetics. A brief history of Alaska Native languages is included.

Attributes: UAA Humanities GER.

AKNS A101A Elementary Central Yup'ik Language I 4 Credits

Introductory course for students with little, or no, prior knowledge of the Central Yup'ik language. Develops listening, speaking, reading, and writing skills in Central Yup'ik for effective communication at the elementary level. Addresses history of Alaska Native languages and culture.

Attributes: UAA Humanities GER.

AKNS A101B Elementary Tlingit Language I 4 Credits

Introductory course for students with little, or no, prior knowledge of the Tlingit language. Develops listening, speaking, reading, and writing skills in Tlingit for effective communication at the elementary level. Addresses history of Alaska Native languages and cultures.

Attributes: UAA Humanities GER.

AKNS A101C Elementary Alaska Native Language I 4 Credits

Introductory course for students with little, or no, prior knowledge of the offered Alaska Native language. Develops listening, speaking, reading, and writing skills in the Alaska Native language for effective communication at the elementary level. Addresses history of Alaska Native languages and cultures.

Special Note: May be repeated one time with a different language.

Attributes: UAA Humanities GER.

AKNS A101D Elementary Inupiaq Language I 4 Credits

Introductory course for students with little or no prior knowledge of the Inupiaq language. Develops listening, speaking, reading and writing skills in Inupiaq for effective communication at the elementary level. Addresses history of Alaska Native languages and culture.

Attributes: UAA Humanities GER.

AKNS A101E Elementary Alutiiq Language I 4 Credits

Introductory course for students with little or no prior knowledge of the Alutiiq language. Develops listening, speaking, reading and writing skills in Alutiiq for effective communication at the elementary level. Addresses history of Alaska Native languages and cultures.

Attributes: UAA Humanities GER.

AKNS A101F Elementary Dena'ina Language 4 Credits

Introductory course for students with little or no prior knowledge of the Dena'ina Athabascan language. Develops listening, speaking, reading and writing skills in Dena'ina for effective communication at the elementary level. Addresses history of Alaska Native languages and cultures.

Attributes: UAA Humanities GER.

AKNS A101H Elementary Ahtna Language I 4 Credits

Introductory course for students with little or no prior knowledge of the Ahtna language. Develops listening, speaking, reading and writing skills in Ahtna Athabascan for effective communication at the elementary level. Addresses history of Alaska Native languages and culture.

Attributes: UAA Humanities GER.

AKNS A102A Elementary Central Yup'ik Language II 4 Credits

Continuation of introductory course. Further develops elementary listening, speaking, reading, and writing skills in Central Yup'ik for effective communication. Enhances appreciation of Alaska Native and cross-cultural perspectives.

May Be Stacked With: AKNS A109A

Prerequisites: AKNS A101A.

Attributes: UAA Humanities GER.

AKNS A102B Elementary Tlingit Language II 4 Credits

Continuation of introductory course. Further develops elementary listening, speaking, reading, and writing skills in Tlingit for effective communication. Enhances appreciation of Alaska Native and cross-cultural perspectives.

May Be Stacked With: AKNS A109B

Prerequisites: AKNS A101B.

Attributes: UAA Humanities GER.

AKNS A102C Elementary Alaska Native Language II 4 Credits

Continuation of introductory course. Further develops elementary listening, speaking, reading, and writing skills in a selected Alaska Native language for effective communication. Enhances appreciation of Alaska Native and cross-cultural perspectives.

Special Note: May be repeated one time with a different language.

Registration Restrictions: Same language as taken in AKNS A101C

May Be Stacked With: AKNS A109C

Prerequisites: AKNS A101C.

Attributes: UAA Humanities GER.

AKNS A102D Elementary Inupiaq Language II 4 Credits

Continuation of introductory course. Further develops elementary listening, speaking, reading and writing skills in Inupiaq for effective communication. Enhances appreciation of Alaska Native and cross-cultural perspectives.

Prerequisites: AKNS A101D.

Attributes: UAA Humanities GER.

AKNS A102E Elementary Alutiiq Language II 4 Credits

Continuation of introductory course. Further develops elementary listening, speaking, reading and writing skills in Alutiiq. Enhances appreciation of Alaska Native and cross-cultural perspectives.

Prerequisites: AKNS A101E with a minimum grade of C.

Attributes: UAA Humanities GER.

AKNS A102H Elementary Ahtna Language II 4 Credits

Continuation of introductory course. Further develops elementary listening, speaking, reading and writing skills in Ahtna Athabascan for effective communication. Enhances appreciation of Alaska Native and cross-cultural perspectives.

Attributes: UAA Humanities GER.

AKNS A109A Central Yup'ik Orthography 4 Credits

Introduction to reading and writing Central Yup'ik for students with oral proficiency in the Central Yup'ik language. Students will be introduced to alphabet and phonetic classification, dialects, and a history of the Central Yup'ik writing system. Enhances cross-cultural perspectives.

Registration Restrictions: Fluency in Central Yup'ik and instructor approval required.

May Be Stacked With: AKNS A102A

AKNS A109B Tlingit Orthography 4 Credits

Introduction to reading and writing Tlingit for students with oral proficiency in the Tlingit language. Students will be introduced to alphabet and phonetic classification, dialects, and a history of the Tlingit writing system. Enhances cross-cultural perspectives.

Registration Restrictions: Fluency in Tlingit and instructor approval required.

May Be Stacked With: AKNS A102B

AKNS A109C Alaska Native Language Orthography 4 Credits

Introduction to reading and writing an Alaska Native language for students with oral proficiency in the Alaska Native language. Students will be introduced to alphabet and phonetic classification, dialects, and a history of the selected Alaska Native language writing system. Enhances cross-cultural perspectives.

Registration Restrictions: Fluency in Alaska Native language and instructor approval required. Must be same language as AKNS A101C.

May Be Stacked With: AKNS A102C

AKNS A109D Alutiiq Orthography 4 Credits

Introduction to reading and writing the Alutiiq language for students with some listening comprehension and verbal skills in Alutiiq. Students will be introduced to alphabet and phonetic classification, dialects, and a history of the Alutiiq writing system. Enhances cross-cultural perspectives.

Registration Restrictions: Prior exposure to spoken Alutiiq and instructor permission.

AKNS A181 Community Project Planning 1 Credit

Introduces the process of community planning for projects requiring grant-based or other funding. Includes capacity and asset-based approaches appropriate to rural communities.

AKNS A182 Grant Writing for Alaska Native Communities 1 Credit

Introduces grant writing focused on community-based grant proposals, including successful approaches appropriate to rural and Alaska Native communities. Includes grant tips, reviewer scoring, grant trends and proposal components.

AKNS A184 Indigenous Leadership and Civic Engagement 1 Credit

Introduces traditional and modern Indigenous styles of leadership, and orients to methods of civic engagement to foster positive community change.

AKNS A185 Event Planning and Meeting Facilitation 1 Credit

Provides an overview of event coordination and meeting facilitation focusing on small and large events common for tribes, rural communities, Native corporations, and organizations.

AKNS A190 Selected Topics: Alaska Native Cultural Skills 1-3 Credits

Focuses on an applied traditional Alaska Native skill. Covers historical and modern practices, as well as traditional knowledge and mentorship learning of Alaska Native practices such as arts, technologies or culinary techniques.

Special Note: May be repeated for a maximum of 9 credits with change of subtitle.

AKNS A201 Alaska Native Perspectives 3 Credits

Introduces Alaska Native perspectives on kinship, time, philosophy, symbolism, spirituality, communication, justice, oral traditions, storytelling, material culture, and the relationship to the environment. Includes the diversity of Alaska Native peoples, languages, and worldviews and how these influence contemporary and global issues.

Attributes: UAA Humanities GER.

AKNS A215 Music of Alaska Natives and Indigenous Peoples of Northern Regions 3 Credits

Explores music and dance practices of Alaska Native and Indigenous peoples of the circumpolar north by region and culture group. Interdisciplinary methods will be used to examine the historical and social dynamics behind changing musical and cultural traditions. Fundamentals of ethnomusicology theory and research methods will be introduced.

Registration Restrictions: AKNS A201 or MUS A111 recommended prior to registering for this course.

Crosslisted With: MUS A215.

Prerequisites: WRTG A111 with a minimum grade of C.

Attributes: UAA Fine Arts GER.

AKNS A216 World Indigenous Music 3 Credits

Survey course on indigenous music cultures of the world. Musical traditions of Europe, the Americas, Africa, Asia, Oceania and the Near/Far East are examined within the context of musical styles and culture.

Crosslisted With: MUS A216

Prerequisites: WRTG A111 with a minimum grade of C.

Attributes: UAA Fine Arts GER.

AKNS A218A Alaska Native Drummaking Techniques: Athabascan and Southeast Style 3 Credits

Studio course in which students learn the fundamentals of making hand drums in the Athabascan and Southeast Alaskan Indian style. Students will also study the living tradition of Alaska Native drum practices.

Crosslisted With: MUS A218A

AKNS A218B Alaska Native Drummaking Techniques: Inupiaq and Yup'ik Style 3 Credits

Studio course in which students learn the fundamentals of making handheld frame drums in the Inupiaq and Yup'ik Alaskan Native tradition. Students will also study the living tradition of Alaska Native drum practices.

Crosslisted With: MUS A218B

AKNS A230 Oral Traditions of Alaska Native People 3 Credits

An introduction to Alaska Native oral traditions, both the stories told by different Alaska Native cultures and the indigenous languages that convey those stories. Topics include the role of oral traditions in sharing knowledge and beliefs in Alaska Native cultures, the importance of indigenous languages in conveying ideas, the translation of oral traditions into recorded or printed media, and contemporary settings where oral traditions continue.

AKNS A240 Alaska Native Cultural Orientation - Alutiiq/Sugpiaq 3 Credits

Holistic introduction to the history, culture, arts, politics, and contemporary issues in the Alutiiq/Sugpiaq region. Designed for professionals and educators working with Native community members and families. Enhances cross-cultural perspectives.

AKNS A261 Alaska Native Art History 3 Credits

Introduces Alaska Native art forms, past and present. Topics include the uses of art in Alaska Native cultures, materials and methods used in creating arts, differences between Native and Western approaches to art, and contemporary approaches to customary art forms. Fosters appreciation of Alaska Native arts and cultures exposing students to world-class artists and collections here in Alaska as well as introducing them to the epistemological underpinnings of Alaska Native art forms.

AKNS A290 Topics in Alaska Native Studies 1-3 Credits

Examines contemporary issues in Alaska Native studies at an introductory level. Course can include political, social and historical aspects of Alaska Native peoples and culture.

Special Note: Subtitle varies. May be repeated for credit up to three times with a different subtitle.

AKNS A292A Alaska Native Language Apprenticeship 1-3 Credits

Introductory language learning through apprenticeship with a fluent speaker of a specific Alaska Native language in an individual or small-group workshop format. Students will learn strategies and techniques of the master-apprentice method and study intensively with a fluent speaker to increase oral fluency. Enhances cross-cultural perspectives.

Registration Restrictions: Instructor permission

AKNS A292B Alaska Native Language Conversational Fluency Intensive 1-3 Credits

Intensive study of conversational speech in an Alaska Native language. Designed to maximize fluency development for students with previous coursework or life experience with an Alaska Native language.

Registration Restrictions: Course prerequisite or instructor permission

Prerequisites: AKNS A101A with a minimum grade of C or AKNS A101B with a minimum grade of C or AKNS A101C with a minimum grade of C or AKNS A101E with a minimum grade of C.

AKNS A313 Tribes, Nations and Peoples 3 Credits

Analyzes and evaluates the history of expansion, invasion, contemporary questions, and issues that confront indigenous tribes, nations and peoples, including their political, social, economic, and cultural activities. Investigates corresponding relations with non-indigenous governments and private entities as well as international developments concerning indigenous human rights.

Crosslisted With: PS A313

Prerequisites: AKNS A201 with a minimum grade of C or PS A102 with a minimum grade of C.

AKNS A346 Alaska Native Politics 3 Credits

Introduction to historical relationships among federal, territorial, state and local laws and policies as they affect Alaska Natives and Native/non-Native relations. Includes contemporary issues and comparative case studies.

Special Note: May be used to fulfill the Alaska studies requirement for teacher certification.

Registration Restrictions: Upper-division standing

Crosslisted With: PS A346

AKNS A356 Yup'ik Music and Dance Ensemble **2 Credits**

Ensemble course in Central Yup'ik Alaska Native music and dance. Teaches movement, singing, drumming and the cultural contextual aspects of Alaska Native dance, including history, culture and connection to language. Designed for students who are interested in learning about Alaska Native creative expression.

Special Note: May be repeated twice for credit.

Crosslisted With: MUS A356

Prerequisites: AKNS A201 with a minimum grade of C or (AKNS A215 with a minimum grade of C or MUS A215 with a minimum grade of C) or (AKNS A216 with a minimum grade of C or MUS A216 with a minimum grade of C).

AKNS A357 Inupiaq Music and Dance Ensemble **2 Credits**

Ensemble course in Inupiaq Alaska Native music and dance. Teaches movement, singing, drumming and the cultural contextual aspects of Alaska Native dance, including history, culture and connection to language. Designed for students who are interested in learning about Alaska Native creative expression.

Special Note: May be repeated twice for credit.

Crosslisted With: MUS A357

Prerequisites: AKNS A201 with a minimum grade of C or (AKNS A215 with a minimum grade of C or MUS A215 with a minimum grade of C) or (AKNS A216 with a minimum grade of C or MUS A216 with a minimum grade of C).

AKNS A432 Indigenous Well-Being and Education **3 Credits**

Examines psychological and cultural perspectives of human development and well-being of indigenous peoples. Designed to promote, nurture, explore and understand the influence of culture on the indigenous person. Of special interest to educators in schools serving indigenous students and individuals working with indigenous communities regarding cultural understandings, and change in historical and contemporary contexts.

Special Note: Course is co-organized as a multi-site international videoconference seminar - collaborating institutions include the University of Alaska Fairbanks, University of Arizona, Dine College, University of British Columbia, University of Montana, University of Hawai'i Hilo, and Te Whare Wananga o Awanuiarangi, New Zealand.

Prerequisites: AKNS A201 with a minimum grade of C or AKNS A346 with a minimum grade of C or ANTH A200 with a minimum grade of C or PS A346 with a minimum grade of C.

AKNS A461 Decolonizing Methodologies **3 Credits**

Introduces research methods informed by Indigenous ways of producing and sharing knowledge, ethical considerations, collaborative research design with Indigenous communities and peoples, the sharing of research materials and outcomes, and multivocal authorship. Examines the process of integrating responsibilities as a researcher with respect for cultural property rights and ownership.

Crosslisted With: ANTH A461.

Prerequisites: AKNS A201 with a minimum grade of C or ANTH A200 with a minimum grade of C.

AKNS A482 Indigenous Knowledge(s) and the Sciences in Global Contexts **3 Credits**

Explores ideologies underlying the sciences and Indigenous Knowledge(s) (IK) including how aspects of each paradigm converge, diverge, or negotiate parallel paths. Surveys IK and Western science methodologies, including how paradigms are constructed and reconstructed through the influence and engagement of Indigenous peoples.

Special Note: Course includes 7 weeks of videoconference and online exchanges with Victoria University of Wellington Te Kawa a Maui-School of Maori Studies students and co-instructor/UAA AKNS affiliate faculty Dr. Ocean Mercier (PhD-Physics).

Prerequisites: AKNS A201 with a minimum grade of C or ANTH A200 with a minimum grade of C.

AKNS A490 Advanced Topics in Alaska Native Studies **1-3 Credits**

Examines topics on contemporary issues in Alaska Native studies at an advanced level. Course can include political, social and historical aspects of Alaska Native people and culture.

Special Note: Subtitle varies. May be repeated three times for credit with a different subtitle.

Registration Restrictions: Upper-division standing

Prerequisites: AKNS A201.

AKNS A492 Cultural Knowledge of Native Elders **3 Credits**

This course is offered in a structured setting to provide a hands-on experiential learning encounter for the student. Elders from different Alaska Native cultures will be invited to participate and impart knowledge to the students. The course fosters an appreciation of diversity across cultures, a broader understanding of creative expression, and indigenous worldview.

Special Note: Students enrolling in this course should have either upper-division class standing with a strong background in the social sciences or appropriate life experience, or a combination of the two prior to enrolling in this course.

Registration Restrictions: AKNS A201 or upper-division standing

AKNS A495 Alaska Native Studies Internship **1-3 Credits**

This is designed as a supervised on-campus or off-campus internship which provides an opportunity for students to work in the professional environment of an Alaska Native organization. Students perform significant work and/or research and develop professional skills and networks. The internship requires a formal agreement between the student, the faculty member and the supervisor.

Special Note: May be repeated for up to 6 credits.

Registration Restrictions: Instructor permission, upper division standing and knowledge of Alaska Native issues required.

Prerequisites: AKNS A201.

American Sign Language (ASL)

Courses

ASL A101 Elementary American Sign Language I **4 Credits**

Introductory course for students with no previous knowledge of ASL. Develops receptive and expressive signing skills in ASL for effective communication at the elementary level. Students gain understanding of basic cross-cultural perspectives. Course conducted in American Sign Language.

Attributes: UAA Humanities GER.

ASL A102 Elementary American Sign Language II **4 Credits**

Continuation of introductory course. Further develops elementary receptive and expressive signing skills in ASL for effective communication. Enhances appreciation of cross-cultural perspectives. Course conducted in American Sign Language.

Prerequisites: ASL A101.

Attributes: UAA Humanities GER.

ASL A201 Intermediate American Sign Language I **4 Credits**

Intermediate course for students with basic knowledge of ASL. Enhances receptive and expressive signing skills for effective communication at the intermediate level. Students critically examine diverse cultural perspectives. Course conducted in American Sign Language.

Prerequisites: ASL A102.

Attributes: UAA Humanities GER.

ASL A202 Intermediate American Sign Language II **4 Credits**

Continuation of first semester in intermediate ASL. Further develops receptive and expressive signing proficiency for effective communication and in preparation for advanced study of ASL. Students interpret diverse cultural perspectives. Course conducted in American Sign Language.

Prerequisites: ASL A201.

Attributes: UAA Humanities GER.

Anthropology (ANTH)

Courses

ANTH A101 Introduction to Anthropology **3 Credits**

Introduces fundamentals of the four subfields of anthropology: archaeology, cultural anthropology, biological anthropology and anthropological linguistics. Emphasizes basic ideas, perspectives and methods of anthropology.

Special Note: Recommended for non-majors. Majors can apply it to their degree as a program elective.

Attributes: UAA Social Sciences GER.

ANTH A200 Alaska Native Cultures **3 Credits**

Surveys Alaska Native peoples, including cultural heritage, ethnohistory, and contemporary experiences from an anthropological perspective. Covers environmental settings, linguistic subdivisions, precolonial sociocultural organization and subsistence patterns, contact with non-Native groups, and key issues, including education, politics and law.

Attributes: UAA Social Sciences GER.

ANTH A202 Cultural Anthropology **3 Credits**

Introduces the fundamental concepts, terminology, ethical considerations and methods in the study of culture and cultural change. Emphasizes cross-cultural comparisons of sociopolitical systems, kinship, ethnicity, gender, subsistence, religion and art, integrating applied, local, regional and global perspectives.

Attributes: UAA Social Sciences GER.

ANTH A205 Biological Anthropology **4 Credits**

Introduces biocultural perspectives on human and non-human primate behavior, biological diversity, and the development of the theory of evolution. Examines the fossil record, genetic and epigenetic variation, physiological adaptations, and applied research in forensic anthropology and bioarchaeology. Exposes students to laboratory practice in biological anthropology.

Attributes: UAA Natural Science w/ Lab GER.

ANTH A210 Linguistic Anthropology **3 Credits**

Introduces the fundamental concepts, terminology, ethical considerations and methods in the anthropological study of language. Explores topics in language and culture, including the origin of human speech, language structure, sociolinguistics, historical linguistics, language change and variation, multilingualism, language endangerment and revitalization, language and gender, and folk taxonomies.

ANTH A211 Archaeology **4 Credits**

Introduces the historical development, basic concepts, terminology, ethical considerations, theories, and methods of archaeology with an emphasis on North American approaches. Exposes students to archaeological laboratory practice.

Attributes: UAA Social Sciences GER.

ANTH A250 The Rise of Civilization **3 Credits**

Introduces the biological and cultural emergence of modern humans, innovations leading to domestication and complex societies, and the roles these played in urbanization, state formation, and civilizations. Compares primary civilizations and may include secondary civilizations.

Attributes: UAA Social Sciences GER.

ANTH A290 Special Topics in Anthropology **1-3 Credits**

Special topics course of general interest in anthropology.

Special Note: May be repeated once for credit with a change in subtitle.

ANTH A390A Arctic and Subarctic Cultures **3 Credits**

Explores anthropological perspectives on Arctic and Subarctic peoples, focusing on Indigenous cultures, settlement, history, languages, social transformations and contemporary experiences. Cultural or sub-regional focus will vary by semester.

Special Note: May be repeated once with a change of subtitle.

Prerequisites: ANTH A200 with a minimum grade of C or ANTH A202 with a minimum grade of C or ANTH A211 with a minimum grade of C or AKNS A201 with a minimum grade of C or INTL A101 with a minimum grade of C or GEOG A101 with a minimum grade of C.

ANTH A390B World Cultures 3 Credits

Explores anthropological perspectives on world peoples, focusing on Indigenous cultures, settlement, history, languages, social transformations and contemporary experiences. Cultural or regional focus will vary by semester.

Special Note: May be repeated once with a change of subtitle.

Prerequisites: ANTH A202 with a minimum grade of C or ANTH A211 with a minimum grade of C or ANTH A250 with a minimum grade of C or INTL A101 with a minimum grade of C or GEOG A101 with a minimum grade of C.

ANTH A390C Comparative Culture Studies 3 Credits

Explores a specific topic of contemporary anthropological inquiry, providing comparative, in-depth insights from at least two of the four subfields of anthropology. Survey of ethnology/ethnography on the topic. Topical focus will vary by semester.

Special Note: May be repeated once with a change of subtitle.

Prerequisites: ANTH A101 with a minimum grade of C or ANTH A202 with a minimum grade of C or ANTH A205 with a minimum grade of C or ANTH A210 with a minimum grade of C or AKNS A201 with a minimum grade of C or INTL A101 with a minimum grade of C or GEOL A101 with a minimum grade of C or SOC A101 with a minimum grade of C or SOC A201 with a minimum grade of C.

ANTH A410 Anthropological Theory 3 Credits

Traces the development of the science of anthropology. Presents key leaders and theoretical paradigms, concluding with contemporary practice.

Special Note: Capstone course for anthropology seniors.

Registration Restrictions: 18 completed credits of anthropology and faculty approval.

ANTH A415 Applied Anthropology 3 Credits

Explores history, theory and methods of applied anthropology in the United States with some emphasis on applying anthropology in Alaska.

Special Note: Not available for credit to students who have completed ANTH A615.

May Be Stacked With: ANTH A615

Prerequisites: ANTH A202 with a minimum grade of C.

ANTH A430 Research Methods in Cultural Anthropology 3 Credits

Introduces modes of scientific data gathering, analysis and interpretation in cultural anthropology. Includes the logic of scientific inquiry, research design, data collection and analysis, field work strategies, ethnographic and report writing, community/partner collaboration, and ethics in social science research.

Special Note: Not available for credit to students who have completed ANTH A630.

May Be Stacked With: ANTH A630

Prerequisites: ANTH A101 with a minimum grade of C or ANTH A202 with a minimum grade of C or ENVI A212 with a minimum grade of C or SOC A101 with a minimum grade of C or SOC A201 with a minimum grade of C.

ANTH A431 Field Methods in Archaeology and Bioanthropology 1-8 Credits

Techniques of archaeological and bioarchaeological survey, mapping and excavation, including archaeological and bioarchaeological data recovery, recording techniques, cataloging and laboratory processing. Project settings may include historic sites, building documentation, archival research, bioarchaeological or forensics themed field schools, and pre-contact Indigenous sites within or outside of Alaska.

Special Note: May be repeated once for credit.

Registration Restrictions: Instructor approval

May Be Stacked With: ANTH A631

Prerequisites: ANTH A211 with a minimum grade of C.

ANTH A452 Culture and Human Biodiversity 3 Credits

Applies modern biocultural theory - including genetics, epigenetics, growth and development, and evolutionary biology - to highlight current understandings of human phenotypic, gender and sexual variation. Explores the historical role that biological anthropology played in the construction of race and gender.

Special Note: Not available for credit to students who have completed ANTH A652.

Registration Restrictions: Completion of Tier 1 (basic college-level) GER courses

May Be Stacked With: ANTH A652

Prerequisites: ANTH A101 with a minimum grade of C or ANTH A202 with a minimum grade of C or ANTH A205 with a minimum grade of C or BIOL A102 with a minimum grade of C or BIOL A108 with a minimum grade of C or SOC A101 with a minimum grade of C.

Attributes: UAA Integrative Capstone GER.

ANTH A454 Culture and Ecology 3 Credits

Explores the integration of cultural and ecological systems, examining sociopolitical dimensions of environmental change and ecological knowledge.

Special Note: Not available for credit to students who have completed ANTH A654.

Registration Restrictions: Completion of Tier 1 (basic college-level) GER courses

May Be Stacked With: ANTH A654

Prerequisites: ANTH A202 with a minimum grade of C or ENVI A212 with a minimum grade of C or GEOG A101 with a minimum grade of C or INTL A101 with a minimum grade of C.

Attributes: UAA Integrative Capstone GER.

ANTH A455 Culture and Health 3 Credits

Surveys the relationship of human culture to health and disease. Includes ancient disease and impact on human evolution, interrelationship between biology and culture, alternative health systems, and applicability to contemporary problems.

Special Note: Not available for credit to students who have completed ANTH A655.

Registration Restrictions: Completion of Tier 1 (basic college-level) GER courses

May Be Stacked With: ANTH A655

Prerequisites: ANTH A202 with a minimum grade of C or ANTH A205 with a minimum grade of C.

Attributes: UAA Integrative Capstone GER.

ANTH A458 Applied Ethics in Anthropology 3 Credits

Examines the ethical issues that confront anthropologists, and the responsibilities they have to the public, the discipline, their colleagues and members of the communities with whom they are working. Course topic will vary with focus on a different subfield of anthropology.

Special Note: May be repeated once with a change of subtitle. Not available for credit to students who have completed ANTH A658 with the same subtitle.

May Be Stacked With: ANTH A658

Prerequisites: ANTH A202 with a minimum grade of C or ANTH A205 with a minimum grade of C or ANTH A210 with a minimum grade of C or ANTH A211 with a minimum grade of C.

ANTH A461 Decolonizing Methodologies 3 Credits

Introduces research methods informed by Indigenous ways of producing and sharing knowledge, ethical considerations, collaborative research design with Indigenous communities and peoples, the sharing of research materials and outcomes, and multivocal authorship. Examines the process of integrating responsibilities as a researcher with respect for cultural property rights and ownership.

Crosslisted With: AKNS A461.

Prerequisites: AKNS A201 with a minimum grade of C or ANTH A200 with a minimum grade of C.

ANTH A464 Culture and Globalization 3 Credits

Explores the relationship between culture and globalization. Examines global capitalism and ethnographic experiences in the context of transnational migration and diasporas, and the influence of new information technologies and media on values, beliefs and practices.

Special Note: Not available for credit to students who have completed ANTH A664.

Registration Restrictions: Completion of Tier 1 (basic college-level) GER courses

May Be Stacked With: ANTH A664

Prerequisites: ANTH A101 with a minimum grade of C or ANTH A202 with a minimum grade of C or ANTH A250 with a minimum grade of C.

Attributes: UAA Integrative Capstone GER.

ANTH A480 Analytical Techniques in Archaeology and Bioanthropology 4 Credits

Critically examines data quality, sampling, quantification and interpretation of material remains with an emphasis on laboratory methods. Topics may include human osteology, zooarchaeology, lithics, ceramics and archaeobotany, among others.

Special Note: May be repeated twice with a change of subtitle. Not available for credit to students who have completed ANTH A680 with the same subtitle.

May Be Stacked With: ANTH A680

Prerequisites: ANTH A205 with a minimum grade of C or ANTH A211 with a minimum grade of C.

ANTH A487 Field Methods in Cultural Anthropology 1-8 Credits

Applies cultural anthropological research techniques by completing field-based research as a class project. Projects vary each semester, but may include archival/historical research and contemporary ethnographic projects. Methods may include qualitative and quantitative data collection with an emphasis on ethnographic research techniques.

Special Note: May be repeated for a maximum of 8 credits.

Registration Restrictions: Instructor approval

May Be Stacked With: ANTH A687

Prerequisites: ANTH A202 with a minimum grade of C or ANTH A210 with a minimum grade of C.

ANTH A490 Selected Topics in Anthropology 1-3 Credits

Examines special topics in anthropology.

Special Note: May be repeated for a maximum of six credits with change of subtitle. Not available for credit to students who have completed ANTH A690 with the same subtopic.

May Be Stacked With: ANTH A690

Prerequisites: ANTH A101 with a minimum grade of C or ANTH A200 with a minimum grade of C or ANTH A202 with a minimum grade of C or ANTH A205 with a minimum grade of C or ANTH A210 with a minimum grade of C or ANTH A211 with a minimum grade of C or ANTH A250 with a minimum grade of C or AKNS A201 with a minimum grade of C or GEOG A101 with a minimum grade of C or INTL A101 with a minimum grade of C or HS A220 with a minimum grade of C or JUST A330 with a minimum grade of C or LSSS A111 with a minimum grade of C or SOC A101 with a minimum grade of C or SOC A202 with a minimum grade of C or WS A200 with a minimum grade of C.

ANTH A490A Health, Ritual and Science 3 Credits

Examines various relationships between human culture, belief and experience to health, disease and wellness. Topical emphasis will vary by semester.

Special Note: May be repeated once with a change of subtitle. Not available for credit to students who have completed ANTH A690A with the same subtitle.

May Be Stacked With: ANTH A690A

Prerequisites: ANTH A101 with a minimum grade of C or ANTH A200 with a minimum grade of C or ANTH A202 with a minimum grade of C or ANTH A250 with a minimum grade of C or GEOG A101 with a minimum grade of C or INTL A101 with a minimum grade of C or HS A220 with a minimum grade of C or JUST A330 with a minimum grade of C or LSSS A111 with a minimum grade of C or SOC A101 with a minimum grade of C or SOC A202 with a minimum grade of C or WS A200 with a minimum grade of C.

ANTH A490B Historical Engagements 3 Credits

Examines the pathways connecting history and anthropology, as seen through material culture, oral traditions, historical documents and shifting disciplinary perspectives.

Special Note: May be repeated once with a change of subtitle. Not available for credit to students who have completed ANTH A690B with the same subtitle.

May Be Stacked With: ANTH A690B

Prerequisites: AKNS A202 with a minimum grade of C or ANTH A200 with a minimum grade of C or ANTH A202 with a minimum grade of C or HIST A377 with a minimum grade of C.

ANTH A490C Belief and Identity 3 Credits

Cross-cultural perspectives on identity related to ethnicity, language, gender, religion and other social factors. Emphasis on topics will vary by semester.

Special Note: May be repeated once with a change of subtitle. Not available for credit for students who have completed ANTH A690C with the same subtitle.

May Be Stacked With: ANTH A690C

Prerequisites: AKNS A202 with a minimum grade of C or ANTH A101 with a minimum grade of C or ANTH A202 with a minimum grade of C or SOC A101 with a minimum grade of C or SOC A202 with a minimum grade of C or WS A200 with a minimum grade of C.

ANTH A490D Topics in the Contemporary North 3 Credits

Holistically examines contemporary Alaska topics, especially as they pertain to Indigenous peoples and communities and the broader Circumpolar North. Identifies ways in which anthropologists address these issues. Topical emphasis will vary by semester.

Special Note: May be repeated once with a change of subtitle. Not available for credit to students who have completed ANTH A690D with the same subtitle.

May Be Stacked With: ANTH A690D

Prerequisites: ANTH A202 with a minimum grade of C or ANTH A205 with a minimum grade of C or ANTH A210 with a minimum grade of C or ANTH A211 with a minimum grade of C.

ANTH A490E Culture, Environment, Place 3 Credits

Examines relationships between human culture, space and place with attention to the constructions, experiences and perceptions of the physical environment.

Special Note: May be repeated once with a change of subtitle. Not available for credit to students who have completed ANTH A690E with the same subtitle.

May Be Stacked With: ANTH A690E

Prerequisites: ANTH A101 with a minimum grade of C or ANTH A200 with a minimum grade of C or ANTH A202 with a minimum grade of C or ANTH A250 with a minimum grade of C or ENVI A212 with a minimum grade of C or GEOG A101 with a minimum grade of C or INTL A101 with a minimum grade of C.

ANTH A495 Practicum in Anthropology 1-3 Credits

Applies practical anthropological skills learned under the supervision of a professional anthropologist.

Special Note: May be repeated once.

Registration Restrictions: 15 credit hours in Anthropology, instructor approval and agency mentor approval

ANTH A499 Senior Thesis in Anthropology 3 Credits

Independent library, laboratory, or field research in anthropology resulting in a substantial, thesis-quality paper.

Special Note: May be repeated once for credit as a part of a two-semester sequence, with permission of thesis advisor. Must satisfy all requirements for honors in Anthropology.

Registration Restrictions: Faculty approval

ANTH A602 Proseminar in Cultural Anthropology 3 Credits

Examines in depth the major theories, concepts and principles in contemporary cultural anthropology, covering topics such as materialism, social structure, power, symbols, practice, cognition and postmodern views as well as postcolonial and indigenous critiques and ethical concerns.

Registration Restrictions: Graduate standing or faculty approval

ANTH A605 Proseminar in Biological Anthropology 3 Credits

Examines methods and theoretical approaches to topics in biological anthropology. Includes the study of evolution, human genetics, primate biology and behavior, human evolution, and statistical interpretation of biological data.

Registration Restrictions: Graduate standing or faculty approval

ANTH A611 Proseminar in Archaeology 3 Credits

Provides a survey of theoretical approaches and practice in contemporary archaeology, including archaeological data analysis and interpretation. Includes case studies, class discussions based on readings, and student presentations.

Registration Restrictions: Graduate standing or instructor approval

ANTH A615 Advanced Applied Anthropology 3 Credits

Explores in depth the history, theory and methods of applied anthropology in the United States with some emphasis on applying anthropology in Alaska.

Special Note: Graduate students will be assigned more in-depth research, additional class readings and mentoring positions for undergraduates.

Registration Restrictions: Graduate standing

May Be Stacked With: ANTH A415

ANTH A620 Research Design 3 Credits

Engages students in method and theory of research design as applied to thesis research. Covers developing a research question, conducting a literature review and writing a thesis prospectus.

Registration Restrictions: Admission to the MA in Anthropology

Prerequisites: ANTH A602 with a minimum grade of B and ANTH A605 with a minimum grade of B and ANTH A611 with a minimum grade of B.

ANTH A630 Advanced Research Methods in Cultural Anthropology 3 Credits

Introduces in depth the modes of scientific data gathering, analysis, and interpretation related in cultural anthropology. Includes the logic of scientific inquiry, research design, data collection and analysis, field work strategies, ethnographic and report writing, ethics in social science research, and grant proposal preparation.

Special Note: Graduate students will be assigned more in-depth research, additional class readings and mentoring positions for undergraduates.

Registration Restrictions: Graduate standing

May Be Stacked With: ANTH A430

ANTH A631 Advanced Field Methods in Archaeology and Bioanthropology 1-8 Credits

Engages students in techniques of archaeological and bioarchaeological survey, mapping and excavation, including archaeological and bioarchaeological data recovery, recording techniques, initial cataloging and laboratory processing. Project setting may include historic sites, building documentation, archival research, bioarchaeological or forensics themed field schools, and pre-contact Indigenous sites within or outside of Alaska.

Special Note: May be repeated once for credit. Graduate students will supervise the work of less experienced undergraduates under the overall supervision of the project director. They will be responsible for the quality of the excavation and recording of their undergraduate crew. They will be critically evaluated as potential professionals.

Registration Restrictions: Graduate standing and instructor approval

May Be Stacked With: ANTH A431

ANTH A652 Advanced Studies in Culture and Human Biodiversity 3 Credits

Applies modern biocultural theory - including genetics, epigenetics, growth and development, and evolutionary biology - to highlight current understandings of human phenotypic, gender and sexual variation. Explores the historical role that biological anthropology played in the construction of race and gender.

Special Note: Graduate students will be assigned more in-depth research, additional class readings and mentoring positions for undergraduates.

Registration Restrictions: Graduate standing

May Be Stacked With: ANTH A452

ANTH A654 Advanced Studies in Culture and Ecology 3 Credits

Explores in depth cultural and ecological systems, examining sociopolitical dimensions of environmental change and ecological knowledge.

Special Note: Graduate students will be assigned more in-depth research, additional class readings and mentoring positions for undergraduates.

Registration Restrictions: Graduate standing

May Be Stacked With: ANTH A454

ANTH A655 Advanced Studies in Culture and Health 3 Credits

Surveys and evaluates the relationship of human culture to health and disease. Includes ancient disease and impact on human evolution, interrelationship between biology and culture, alternative health systems, and applicability to contemporary problems.

Special Note: Graduate students will be assigned more in-depth research, additional class readings and mentoring positions for undergraduates.

Registration Restrictions: Graduate standing

May Be Stacked With: ANTH A455

ANTH A658 Advanced Applied Ethics in Anthropology 3 Credits

Examines critically the ethical issues that confront anthropologists and archaeologists, and the responsibilities they have to the public, the discipline, their colleagues, and members of the communities with whom they are working. Course topic will vary with focus on a different subfield of anthropology.

Special Note: May be repeated once with a change of subtitle. Graduate students will be assigned more in-depth research, additional class readings and mentoring positions for undergraduates.

Registration Restrictions: Graduate standing

May Be Stacked With: ANTH A458

ANTH A664 Advanced Studies in Culture and Globalization 3 Credits

Explores critically the relationship between culture and globalization. Examines global capitalism and ethnographic experiences in the context of transnational migration and diasporas, and the influence of new information technologies and media on cultural values, beliefs and practices.

Special Note: Graduate students will be assigned more in-depth research, additional class readings and mentoring positions for undergraduates.

Registration Restrictions: Graduate standing

May Be Stacked With: ANTH A464

ANTH A675 Cultural Resource Management 3 Credits

Provides an integrated anthropological perspective on historic preservation and the management of cultural resources in the United States. Includes the history of resource protection legislation, the design and implementation of cultural resource management projects, and applications of relevant cultural resource laws, including ethical issues.

Registration Restrictions: Graduate standing

ANTH A680 Advanced Analytical Techniques in Archaeology and Bioanthropology 4 Credits

Critically examines data quality, sampling, quantification and interpretation of material remains with an emphasis on laboratory methods. Topics vary by semester and may include human osteology, zooarchaeology, lithics, ceramics and archaeobotany, among others.

Special Note: May be repeated two times with a change of subtitle. Graduate students will be assigned more in-depth research, additional class readings and mentoring positions for undergraduates.

Registration Restrictions: Graduate standing

May Be Stacked With: ANTH A480

ANTH A687 Advanced Field Methods in Cultural Anthropology 1-8 Credits

Applies cultural anthropological research techniques by completing field-based research as a class project. Projects vary each semester but may include archival/historical research and contemporary ethnographic projects. Methods may include qualitative and quantitative data collection with an emphasis on ethnographic research techniques.

Special Note: May be repeated for a maximum of 8 credits. Graduate students will supervise undergraduate tasks under supervision of instructor.

Registration Restrictions: Graduate standing and instructor approval

May Be Stacked With: ANTH A487

ANTH A690 Selected Topics in Anthropology 1-3 Credits

Examines special topics in anthropology at the graduate level.

Special Note: May be repeated for a maximum of 6 credits with a change of subtitle.

Registration Restrictions: Graduate standing

May Be Stacked With: ANTH A490

ANTH A690A Advanced Studies in Health, Ritual and Science 3 Credits

Examines and evaluates various relationships between human culture, belief and experience to health, disease and wellness. Topical emphasis will vary by semester.

Special Note: May be repeated once with a change of subtitle. Graduate students will be assigned more in-depth research, additional class readings and mentoring positions for undergraduates.

Registration Restrictions: Graduate standing

May Be Stacked With: ANTH A490A

ANTH A690B Advanced Studies in Historical Engagements 3 Credits

Examines and evaluates the pathways connecting history and anthropology, as seen through material culture, oral traditions, historical documents and shifting disciplinary perspectives.

Special Note: May be repeated once with a change of subtitle. Graduate students will be assigned more in-depth research, additional class readings and mentoring positions for undergraduates.

Registration Restrictions: Graduate standing

May Be Stacked With: ANTH A490B

ANTH A690C Advanced Studies in Belief and Identity 3 Credits

Examines and evaluates cross-cultural perspectives on identity related to ethnicity, language, gender, religion and other social factors. Topical emphasis will vary by semester.

Special Note: May be repeated once with a change of subtitle. Graduate students will be assigned more in-depth research, additional class readings and mentoring positions for undergraduates.

Registration Restrictions: Graduate standing

May Be Stacked With: ANTH A490C

ANTH A690D Advanced Studies in the Contemporary North 3 Credits

Examines and evaluates contemporary Alaska topics, especially as they pertain to Indigenous peoples and communities and the broader Circumpolar North. Identifies ways in which anthropologists and archaeologists address these issues. Topical emphasis will vary by semester.

Special Note: May be repeated once with a change of subtitle. Graduate students will be assigned more in-depth research, additional class readings and mentoring positions for undergraduates.

Registration Restrictions: Graduate standing

May Be Stacked With: ANTH A490D

ANTH A690E Advanced Studies in Culture, Environment, Place 3 Credits

Examines and evaluates relationships among human culture, space and place with attention to the constructions and perceptions of the physical environment.

Special Note: May be repeated once with a change of subtitle. Graduate students will be assigned more in-depth research, additional class readings and mentoring positions for undergraduates.

Registration Restrictions: Graduate standing

May Be Stacked With: ANTH A490E

ANTH A695 Anthropology Practicum 1-3 Credits

Engages in an anthropology practicum in the public or private sector. Emphasizes the application of anthropological skills under the supervision of a professional anthropologist.

Special Note: Arranged practicum between graduate advisor and an outside mentor.

Registration Restrictions: Graduate standing

ANTH A698 Individual Research 1-9 Credits

Engages student in supervised field, laboratory and/or library research that precedes thesis writing.

Special Note: Only 3 credits can be used to fulfill minimum 30-credit requirement for graduation. Course cannot be taken until other required non-thesis coursework is completed. May be repeated for a maximum of 18 credits.

Registration Restrictions: Completion of non-thesis course requirements

Prerequisites: ANTH A602 and ANTH A605 and ANTH A611.

ANTH A699 Thesis Research 1-6 Credits

Engages student in independent research conducted under the supervision of a graduate committee.

Special Note: Students may enroll for variable credit, but at least one credit is required for graduation. Offered during all semesters. May be repeated for a maximum of 6 credits.

Registration Restrictions: Advancement to candidacy and thesis chair approval

Applied Environ Sci & Tech (AEST)

Courses

AEST A601 Aquatic Process Chemistry 3 Credits

An introduction to fundamental aquatic chemistry concepts frequently encountered in environmental science and engineering. An equilibrium approach with an emphasis on treatment process and natural water chemistry is employed. Both a qualitative and quantitative understanding of equilibrium calculations and the ability to apply both graphical and algebraic/numerical solution techniques to chemistry problems.

Registration Restrictions: Registrants must be enrolled in the AEST, CE, or BIOL graduate programs, or gain instructor approval.

AEST A602 Water Quality Management 3 Credits

An assessment of the rationale, concepts, institutions, and engineering aspects of water quality management. Regulatory processes, monitoring strategies and statistics, flow and mixing characteristics, pollutant chemistry, assessment strategies, point and nonpoint source characteristics, the Total Maximum Daily Load (TMDL) process, and mitigation measures are covered.

Registration Restrictions: Registrants must be enrolled in the AEST, CE, or BIOL graduate programs, or gain instructor approval.

AEST A603 Solid Waste Management 3 Credits

Planning, collecting and disposing of solid waste; techniques of collection, transportation, disposal and resource recovery; solid waste environmental regulations and relationships to water, air, and land pollution; hazardous waste management.

Registration Restrictions: Registrants must be enrolled in the AEST, CE, or BIOL graduate programs, or gain instructor approval.

AEST A604 Environmental Law, Regulations and Permitting 3 Credits

Introductory graduate level course on understanding and navigating environmental laws and regulations. Students will learn the principles of the major environmental laws in the U.S., practice interpreting regulations, and prepare permits.

Registration Restrictions: Bachelor of Science degree in a science or engineering discipline.

AEST A605 National Environmental Policy Act 3 Credits

Examines the National Environmental Policy Act (NEPA) requirements, including process, roles and responsibilities of involved parties, impact analysis, alternative development, stakeholder involvement and environmental conflict resolution. Subject matter experts from State and Federal agencies, industry, environmental nongovernmental organizations and utilities will provide their perspectives on NEPA.

Registration Restrictions: Bachelor of Science degree in a science or engineering discipline.

AEST A606 Clean Water Act 3 Credits

Examines the Clean Water Act and its impact on the environment. The course will explore the history of the Act, and various programs established by the Act, including the Section 404 wetlands program and the National Pollutant Discharge Elimination System (NPDES) pollution control program. Subject matter experts from State and Federal agencies, industry, environmental nongovernmental organizations and utilities will provide their perspectives on the Clean Water Act and its effectiveness.

Registration Restrictions: Bachelor of Science degree in a science or engineering discipline.

AEST A607 Environmental Permitting Project 3 Credits

Explores the complex relationship between environmental regulatory and permitting requirements and their application to engineering and science projects.

Registration Restrictions: Admission to Applied Environmental Science and Technology graduate program.

Prerequisites: AEST A604 with a minimum grade of B and AEST A605 with a minimum grade of B and AEST A606 with a minimum grade of B.

AEST A666 Methods, Assessment and Communication of Basic and Applied Research 3 Credits

An overview of the structure, methods and assessment tools needed to conduct graduate level research in environmental science and engineering fields. The course is designed to guide the student through the process of establishing, organizing, writing and presenting a graduate level research project conducive to a publication, thesis or proposal.

Registration Restrictions: Graduate standing in AEST program, Civil Engineering or instructor permission.

AEST A698 Individual Research 1-6 Credits

A course to be designed between the student and faculty member to allow the student the chance to pursue special advanced interests in engineering at the graduate level.

Registration Restrictions: Registrants must be enrolled in the AEST, CE, or BIOL graduate programs, or gain instructor approval.

AEST A699 AEST Thesis 1-6 Credits

Arranged between the advisor and the student. Generally the student has been admitted to candidacy for the master's degree and a thesis committee is formed. The student must take an oral exam defending the thesis.

Registration Restrictions: Registrants must be enrolled in the AEST graduate program.

Architect Engineering Tech (AET)

Courses

AET A100 Fundamentals of Drafting 3 Credits

Basic course in college drafting, designed to provide students with the fundamental skills and knowledge necessary to communicate using language of industry. Matanuska-Susitna College

Special Note: For non-majors only.

AET A101 Fundamentals of CADD for Building Construction 4 Credits

Introduces basic computer-aided drafting and design (CADD) skills necessary in civil, architectural, structural, mechanical and electrical modeling within the construction industry. Defines the working relationship between design and construction professionals and technicians.

Registration Restrictions: Proof of eligibility for placement into WRTG A111. Appropriate SAT, ACT or UAA-approved math placement test scores may be used in lieu of MATH A105.

Prerequisites: MATH A105 with a minimum grade of C or concurrent enrollment.

AET A102 Methods of Building Construction 3 Credits

Introduces basic knowledge of building materials, systems and assemblies. Includes site work, structural systems and construction document interpretation. Includes a field project involving student team research of a current building type.

Registration Restrictions: Proof of eligibility for placement into WRTG A111 and MATH A105

AET A108 Technical Graphics and Modeling for Engineers 3 Credits

Introduces and develops skills for projection theory, sketching by hand, AutoCAD drafting, REVIT Systems, and Civil 3D modeling software.

AET A111 Civil Construction Drawings 3 Credits

Introduces technical skills needed by technicians to work with civil engineers and surveyors. Includes office practices, staff relationships and civil drawing production. Develops skills in modeling and mapping used in site development.

Prerequisites: AET A102 and AET A181 with a minimum grade of C.

AET A121 Architectural Construction Drawings 3 Credits

Introduces technical skills needed by architectural technicians to work with architects. Includes office practices, staff relationships and architectural construction drawing production. Develops skills in architectural modeling, symbols, conventions, dimensioning systems, reference systems, sheet organization, code requirements and research methods for detailing light commercial buildings.

Prerequisites: AET A102 and AET A181 with a minimum grade of C.

AET A123 Codes and Standards 3 Credits

Provides an introduction and overview of the fundamental provisions of the building codes used for plan review, life-safety evaluation of the buildings, and community development.

Prerequisites: AET A101 and AET A102 with a minimum grade of C.

AET A131 Structural Construction Drawings 3 Credits

Introduces technical skills needed by structural technicians to work with structural engineers. Includes office practices, staff relationships and structural drawing production. Develops skills in modeling, symbols, conventions, dimensioning systems, sheet organizations, code analysis, and research methods for steel, wood and reinforced concrete buildings.

Prerequisites: AET A102 and AET A181 with a minimum grade of C.

AET A142 Mechanical and Electrical Technology 4 Credits

Introduces the basic mechanical and electrical systems required in all buildings for the safety, health, comfort and convenience of the occupants. Emphasizes design criteria, code requirements, interpretation of construction drawings and building energy usage.

Registration Restrictions: Appropriate SAT, ACT or UAA-approved math placement test scores may be used in lieu of the MATH A105 prerequisite.

Prerequisites: AET A101 and AET A102 and MATH A105 with a minimum grade of C.

AET A143 Mechanical and Electrical Construction Drawings 3 Credits

Introduces technical analysis, theory, code requirements, modeling techniques and construction drawing methodology to produce construction drawings for mechanical and electrical building systems. Includes drawing conventions, symbols, terminology, and research methods for residential and commercial building mechanical and electrical systems and equipment.

Prerequisites: AET A102 and AET A181 with a minimum grade of C.

AET A181 Intermediate CADD for Building Construction 4 Credits

Develops intermediate-level computer-aided design and drafting (CADD) skills for architectural, civil, structural, mechanical and electrical construction drawings used in building construction. Includes 3-D modeling.

Prerequisites: AET A101 with a minimum grade of C.

AET A213 Civil Technology 4 Credits

Outlines elements of civil design, including soils and soil mechanics, foundations, roads, and utilities using local, state and federal regulations. Introduces elements of construction surveying.

Registration Restrictions: Appropriate SAT, ACT or UAA-approved math placement test scores may be used in lieu of the MATH A105 prerequisite.

Prerequisites: AET A111 and MATH A105 with a minimum grade of C.

AET A231 Structural Technology 4 Credits

Examines structural theory and the physical principles that underlie structural behavior. Includes the use of materials in a manner to maintain structural stability against natural forces such as gravity, wind, snow and earthquakes. Covers connection details and code requirements for wood, steel and reinforced concrete.

Registration Restrictions: Appropriate SAT, ACT or UAA-approved math placement test scores may be used in lieu of the MATH A105 prerequisite.

Prerequisites: AET A101 and AET A102 and MATH A105 with a minimum grade of C.

AET A286 Design Project 4 Credits

Provides a culminating problem-solving situation for students from the various certificate programs. The problem will be taken from community-generated enterprise and solved in a project-based learning environment.

Prerequisites: AET A181 and (AET A111 or AET A121 or AET A131 or AET A143).

AET A295 Architectural and Engineering Technology Internship 1-3 Credits

Places students in generalized and specialized architectural, engineering or building construction offices related to student educational program and occupational objectives. Direct supervision by architect, engineer, or contractor professional, program faculty, and Cooperative Education Director.

Registration Restrictions: Sophomore standing and faculty permission.

Arctic Engineering (AE)

Courses

AE A403 Arctic Engineering 3 Credits

Introduces students to a broad spectrum of engineering challenges unique to cold regions. Discusses physical principles and practical data collection methods, analyses, designs and construction methods. Students gain a working knowledge of cold regions engineering problems and modern solutions as a basis for more detailed study.

Special Note: Not available for credit to students who have completed AE A603.

Registration Restrictions: Junior or senior standing in an accredited undergraduate program in engineering or construction management.

May Be Stacked With: AE A603

AE A603 Arctic Engineering 3 Credits

Introduces students to a broad spectrum of engineering challenges unique to cold regions. Discusses physical principles and practical data collection methods, analyses, designs, and construction methods. Students gain a working knowledge of cold regions engineering problems and modern solutions as a basis for more detailed study. Students must submit a research paper.

Special Note: Not available for credit to students who have completed AE A403.

Registration Restrictions: Graduate standing with a baccalaureate degree in engineering.

May Be Stacked With: AE A403

AE A681 Frozen Ground Engineering 3 Credits

Introduces students to physical, thermal and mechanical properties of frozen soils; frost action; heat flow in soils; thaw behavior of frozen ground; foundations in frozen ground; construction ground freezing; and pavement design, earthwork, and field investigations for frozen ground.

Registration Restrictions: Graduate standing with a baccalaureate degree in engineering or upper class standing in an accredited undergraduate program in engineering.

AE A682 Ice Engineering 3 Credits

Introduces students to factors governing design of engineering works contending with the presence of ice. Includes fundamental ice properties, ice processes, ice navigation and control of ice in channels, structural and non-structural ice control measures, ice jams, bearing capacity of floating ice sheets, and ice forces on riverine and ocean structures.

Registration Restrictions: Graduate standing with a baccalaureate degree in engineering or upper class standing in an accredited undergraduate program in engineering having completed a mechanics of materials course with a minimum grade of C.

AE A683 Arctic Hydrology and Hydraulic Engineering 3 Credits

Introduces students to aspects of hydrology and hydraulics unique to engineering problems of the North. Although emphasis is placed on Alaska conditions, information from Canada and other circumpolar countries is included.

Registration Restrictions: Graduate standing with a baccalaureate degree in engineering or physical science, or upper class standing in an accredited undergraduate program in engineering having completed a water resources course with a minimum grade of C.

AE A684 Arctic Utility Distribution 3 Credits

Introduces students to physical principles and current practices associated with the planning and design of safe, efficient and affordable water supply, fire protection, wastewater collection and disposal, and solid waste disposal works in cold regions with a view toward conditions in rural arctic Alaska.

Registration Restrictions: Graduate standing with a baccalaureate degree in engineering or physical science or upper class standing in an accredited undergraduate program in engineering, having completed a water resources course with a minimum grade of C.

AE A685 Arctic Applications of Heat and Mass Transfer 3 Credits

Introduces principles of heat and mass transfer with special emphasis on application to problems encountered in the Arctic such as ice and frost formation, permafrost, condensation and heat loss in structures.

Registration Restrictions: Graduate standing with a baccalaureate degree in engineering or upper class standing in an accredited undergraduate program in engineering having completed a thermodynamics course with a minimum grade of C.

AE A689 Cold Regions Pavement Design 3 Credits

Design, maintenance and rehabilitation of pavement structures in cold regions where frost, snow and ice threaten expected service life.

Registration Restrictions: Graduate standing with a baccalaureate degree in engineering, or upper-class standing in an accredited undergraduate program in engineering having completed a transportation engineering course with a minimum grade of C.

AE A698 Arctic Engineering Project 3 Credits

Culminating project for MS Arctic Engineering students. The project is arranged among the advisor, graduate advisory committee and student to solve a practical cold regions engineering problem.

Registration Restrictions: Graduate standing in arctic engineering with completion of a minimum of 9 graduate AE credits.

Art (ART)

Courses

ART A100 Two-Dimensional Activities (Topics in Drawing, Design, or Painting) **1-3 Credits**

Art studio topics in drawing, painting, or design may be offered to introduce possible areas for future concentrated study. Recommended for students seeking initial exposure to studio arts.

Special Note: Does not satisfy BA or BFA degree requirements. May be repeated 3 times for credit in different topic areas.

ART A101 Three Dimensional Activities (3-D Materials and Techniques) **1-3 Credits**

Art studio topics in sculpture, ceramics, or metalsmithing may be offered to introduce possible areas for future concentrated study. Recommended for students seeking initial exposure to studio arts.

Special Note: Does not satisfy BA or BFA degree requirements. May be repeated 3 times for credit in different topic areas.

ART A103 Replicative Arts (Topics in Printmaking, Photography and Digital Arts) **1-3 Credits**

Art studio topics in printmaking, photography, and digital arts may be offered to introduce possible areas for future concentrated study. Recommended for students seeking initial exposure to studio arts.

Special Note: Does not satisfy BA or BFA degree requirements. May be repeated 3 times for credit in different topic areas.

ART A104 Multi-Media Activities **1-3 Credits**

Art studio topics combining two or more disciplines in multi-media art processes to introduce possible areas for future concentrated study. Recommended for students seeking initial exposure to studio arts.

Special Note: Does not satisfy BA or BFA degree requirements. May be repeated 3 times for credit in different topic areas.

ART A105 Beginning Drawing **3 Credits**

Introduces elements of drawing based on development of skill using wet and dry media such as pencil, charcoal, conte, ink, and brush. Drawing focuses on composition of objects, still lifes, perspective effects, and the human figure.

May Be Stacked With: ART A205 and ART A305

ART A111 Two-Dimensional Design **3 Credits**

Study of the organization, structure, and composition of form through the use of the basic design elements including color. Emphasis on development of design as related to two-dimensional art.

ART A112 Color Design **3 Credits**

Study of fundamentals of color and two-dimensional visual perception. Projects will emphasize evaluation and mixing of color.

ART A113 Three-Dimensional Design **3 Credits**

Exploration of three-dimensional design. Focus on terminology, exploration of materials, and appropriate use of hand and power tools. Development of problem-solving skills and methods of self-evaluation.

ART A160 Art Appreciation **3 Credits**

Development of an appreciation of all the visual arts. Emphasis is on the theories, practice, materials and techniques of the visual arts.

Attributes: UAA Fine Arts GER.

ART A180A Beginning Stained Glass **3 Credits**

Overview of history and concepts of stained glass and the application of techniques and design principles of stained glass. Development of flat and/or 3-D copper foil stained glass pieces of art.

Special Note: Does not apply to BA/BFA Art degrees.

ART A180B Intermediate Stained Glass **1 Credit**

Overview of contemporary history and concepts of stained glass and the application of techniques and design principles of stained glass. Development of flat and/or 3-D copper foil stained glass pieces of art.

Special Note: Does not apply to the BA/BFA Art degrees.

Prerequisites: ART A180A.

ART A201 Beginning Handbuilt Ceramics **3 Credits**

Introduction to ceramic materials and processes. Emphasis on handbuilt forming methods and earthenware temperature range. Includes clays, clay bodies, slips, glazes, and firing process. Introduces ceramic history, idea development and creative problem solving.

May Be Stacked With: ART A301 and ART A401

ART A202 Beginning Wheelthrown Ceramics **3 Credits**

Introduction to ceramic materials and processes. Emphasis on wheelthrowing methods and stoneware temperature range. Includes clays, clay bodies, slips, glazes, and firing process. Introduces ceramic history, idea development and creative problem solving.

May Be Stacked With: ART A302 and ART A402

Prerequisites: ART A201.

ART A203 Introduction to Art Education **3 Credits**

Introduction to general art education, museum education, and to theories, issues and practices in historical and contemporary contexts. Includes rationales for teaching and learning art, theories of children's developmental levels in art, art and technology, and teaching practices through text and journal readings.

Prerequisites: WRTG A111 with a minimum grade of C.

ART A205 Intermediate Drawing **3 Credits**

Expands visual awareness, technical ability and creative/conceptual drawing practices. Investigates complex technical, intuitive, and creative approaches to drawing.

May Be Stacked With: ART A105 and ART A305

Prerequisites: ART A105 with a minimum grade of C.

ART A211 Beginning Sculpture **3 Credits**

Exploration of fundamental elements of sculpture: form, mass, volume, scale, material, and surface. Introduction to aesthetics and history of modern sculpture. Includes tools, techniques, and materials available to the sculptor.

May Be Stacked With: ART A311 and ART A411

Prerequisites: ART A105 and ART A113.

ART A212 Beginning Watercolor **3 Credits**

Exploration of aquarelle techniques. Emphasizes composition as affected by color, value, stylistic considerations and individual expression; exhibition procedures are included.

Prerequisites: ART A105 with a minimum grade of C.

ART A213 Beginning Painting 3 Credits

Introduction to materials and traditional techniques as applied to painting as a fine art. Focus on visual awareness, technical ability and conceptual input with investigation of intuitive and creative approaches. Subject matter drawn from still life, landscape/nature, interior spaces and the human form.

Special Note: May be repeated once for credit with substantive changes in media or emphasis.

May Be Stacked With: ART A313, ART A413 and ART A414

Prerequisites: ART A105.

ART A215 Beginning Printmaking 3 Credits

Introduces basic skills and concepts of printmaking process. Focuses on creativity and craftsmanship including traditional and contemporary printmaking methods and skills.

May Be Stacked With: ART A315 and ART A415

Prerequisites: ART A105 and ART A111.

ART A220 Digital Imaging for Photography 3 Credits

Post-processing and editing in the digital darkroom for artistic expression and commercial creation of digital photographs.

Special Note: May be taken concurrently with ART A225.

Registration Restrictions: Demonstrated computer competency or ART A103 selected topic: Creative Digital Darkroom.

ART A224 Beginning Photography 3 Credits

Introduces basic digital photography principles and composition. Explores camera functions for artistic expression in the creation of photographic images with equipment such as digital single lens reflex cameras. Investigates a basic software workflow to produce creative images.

ART A225 Beginning Photography - Digital 3 Credits

Basic principles and essential expertise for artistic and commercial expression in the creation of black and white photographic images with digital single lens reflex cameras.

Prerequisites: ART A220 or concurrent enrollment.

ART A228 Art as a Profession 3 Credits

Develops awareness of professional presentations and career paths in art disciplines. Students will create a preliminary presentation and working portfolio.

Registration Restrictions: At least one Art Studio or Digital Art Program concentration course must be taken in addition to prerequisite list.

Prerequisites: ART A105 and ART A111 and ART A112 and (ART A205 or ART A257) and ART A261 and ART A262.

ART A252 Beginning Graphic Design 3 Credits

Idea development and creative problem solving skills for the commercial market. Introduction to client identity, printing and production processes.

Special Note: May be repeated once for credit.

Prerequisites: ART A105 with a minimum grade of C and ART A111 with a minimum grade of C.

ART A257 Computer Art 3 Credits

Introduces computer tools and techniques, including raster and vector graphics, to create imagery and illustrations in the Fine Arts and Applied Arts. Coursework encourages creativity and exploration, using the application of computer tools and software programs to create images for print, web and other applications.

Special Note: May be repeated once for credit with substantive change in media or emphasis with instructor approval.

Prerequisites: ART A105 with a minimum grade of C and ART A111 with a minimum grade of C.

ART A261 History of Western Art I 3 Credits

Origins and development of painting, sculpture and architecture. Covers the history of art from prehistory through the Medieval Period of the Western World.

Prerequisites: WRTG A111 with a minimum grade of C.

Attributes: UAA Humanities GER.

ART A262 History of Western Art II 3 Credits

Origins and development of painting, sculpture and architecture. Covers the history of art from the Renaissance through the modern period with an emphasis on the art of the Western World.

Prerequisites: WRTG A111 with a minimum grade of C.

Attributes: UAA Humanities GER.

ART A270 Beginning Alaska Native Art 3 Credits

Exposes and applies indigenous production, rhythms, and attitudes toward making carved art objects. Investigates Alaska Native art history, oral experience and lifeways. Emphasizes the development of a personal aesthetic and creative design.

May Be Stacked With: ART A370 and ART A470

ART A295 Internship Digital Art 1-3 Credits

Internship position. Placement is dependent upon interest, expertise, prerequisites and appropriateness to the position.

Special Note: May be repeated for a total of 6 credits. Kenai Peninsula College

Registration Restrictions: Admission to program and completion of eight program core courses and three program concentration courses.

ART A295V Internship Visual Art 1-3 Credits

Internship position. Placement dependent upon interest, expertise, prerequisites and appropriateness to position.

Special Note: May be repeated once for a total of 6 credits. Kenai Peninsula College

Registration Restrictions: Must have completed four program core courses, at least one upper-division studio course, and must be enrolled in 6 credits including internship (waived during summer session), and have a 3.00 GPA.

ART A301 Intermediate Handbuilt Ceramics 3 Credits

Intensified development of handbuilt forming methods with emphasis on form, content and creative problem solving. Focus on the ceramic process as a vehicle for personal creative expression.

Special Note: May be repeated once for credit with substantive change in media or emphasis.

Registration Restrictions: Instructor permission

May Be Stacked With: ART A201 and ART A401

Prerequisites: ART A105 and ART A113 and ART A201.

ART A302 Intermediate Wheelthrown Ceramics 3 Credits

Intensified development of wheelthrowing techniques with emphasis on the history, aesthetics and porcelain temperature range of functional pottery. Focus is on the ceramic process as a vehicle for personal creative expression.

Special Note: May be repeated once for credit with substantive change in media or emphasis.

Registration Restrictions: Instructor permission

May Be Stacked With: ART A202 and ART A402

Prerequisites: ART A105 and ART A113 and ART A201 and ART A202.

ART A305 Advanced Drawing 3 Credits

Examines advanced contemporary conceptual approaches, techniques, and materials in drawing.

Special Note: May be repeated once for credit with substantive change in media or emphasis.

Registration Restrictions: Prerequisite(s) or instructor approval

May Be Stacked With: ART A105 and ART A205

Prerequisites: ART A205 with a minimum grade of C.

ART A307 Life Drawing and Composition I 3 Credits

Drawing from live models to explore possibilities in design, composition and media. Emphasizes form and space using wet and dry media including charcoal, graphite, pen and brush.

Special Note: May be repeated once for credit with substantive change in media or emphasis.

Registration Restrictions: Prerequisite(s) or instructor approval

May Be Stacked With: ART A407

Prerequisites: ART A205 with a minimum grade of C.

ART A311 Intermediate Sculpture 3 Credits

Exploration of sculptural concepts and processes with emphasizing aesthetics and history of modern sculpture. Focus on development of construction skills with access to advanced machines and tools and their applications.

Special Note: May be repeated once for credit with substantive change in media or emphasis.

Registration Restrictions: Instructor permission

May Be Stacked With: ART A211 and ART A411

Prerequisites: ART A211.

ART A312 Intermediate Watercolor 3 Credits

Intensified development of expressive skills including watercolor techniques and refines material uses with the emphasis on individual approaches to traditional and non-traditional pictorial and conceptual problems.

Special Note: May be repeated once for credit with substantive change in media or emphasis.

May Be Stacked With: ART A412

Prerequisites: ART A212.

ART A313 Intermediate Painting 3 Credits

Intensified development of expressive skills in painting. Reviews beginning painting techniques and refines material uses with emphasis on individual approaches to pictorial and conceptual problems.

Special Note: May be repeated once for credit with substantive change in media or emphasis.

Registration Restrictions: Instructor permission

May Be Stacked With: ART A213, ART A413 and ART A414

Prerequisites: ART A213.

ART A315 Intermediate Printmaking 3 Credits

Explores the major processes (lithography, serigraphy, intaglio and relief processes) linked to contemporary and digital developments.

Special Note: May be repeated 3 times for credit with change of printmaking process.

Registration Restrictions: Instructor permission

May Be Stacked With: ART A215 and ART A415

Prerequisites: ART A215.

ART A323 Color Photography 3 Credits

Investigates techniques and conceptual approaches to color photography. Encourages creative exploration and artistic expression of diverse approaches to color shooting, processing and lighting in digital photography.

Special Note: May be repeated once for credit with a substantive change in medium or emphasis.

Prerequisites: ART A224 with a minimum grade of C.

ART A324 Intermediate Photography 3 Credits

Investigates intermediate level techniques and conceptual approaches to digital photography. Encourages creative exploration of diverse attitudes and approaches with lighting and black and white photography for artistic expression, shooting, software processing, and printing of black and white digital images.

May Be Stacked With: ART A424

Prerequisites: ART A224 with a minimum grade of C.

ART A325 Digital Media for Photography 3 Credits

Encourages different creative points of view using digital photographic technology for artistic expression. Includes digital image acquisition with a digital or film camera and film scanner while further developing studio lighting, commercial digital approaches, digital darkroom techniques, and printing digital images. Kenai Peninsula College

Registration Restrictions: If ART A324 is used as a prerequisite, it must have integrated darkroom/digital content.

Prerequisites: ART A323 and (ART A225 or ART A324).

ART A331 Experimental Photography 3 Credits

Investigates experimental techniques and conceptual approaches to photography. Encourages exploration of diverse materials, techniques and innovative methods for making photographic artwork.

Special Note: May be repeated once for credit with substantive change in medium or emphasis.

Prerequisites: ART A324 with a minimum grade of C.

ART A352 Intermediate Graphic Design 3 Credits

Projects focusing on applied creative approaches in intermediate graphic design.

Special Note: May be repeated once for credit.

Registration Restrictions: Instructor permission

May Be Stacked With: ART A452

Prerequisites: ART A252.

ART A353 Illustration I 3 Credits

Study of methods for the production of illustrations. Study of problem-solving processes balancing personal creative expression with client needs.

Special Note: May be repeated once for credit.

Registration Restrictions: Instructor permission

May Be Stacked With: ART A453

Prerequisites: ART A257.

ART A357 Digital Art and Design II 3 Credits

Exploration of 2-D digital tools and techniques for creative expression, emphasizing production of hard copy.

Special Note: May be repeated once for credit with substantive change in emphasis with faculty approval.

Registration Restrictions: Instructor permission

Prerequisites: ART A257.

ART A360A History of Non-Western Art I 3 Credits

Emphasis on a comparative approach to non-western civilizations including Indian art, Tibetan and Southeastern art, Chinese art, and Japanese art.

Prerequisites: WRTG A111 with a minimum grade of C.

Attributes: UAA Humanities GER.

ART A360B History of Non-Western Art II 3 Credits

Emphasis on a comparative approach to non-western civilizations including Islamic art, African art, art of Pacific cultures, and art of the Americas.

Prerequisites: WRTG A111 with a minimum grade of C.

Attributes: UAA Humanities GER.

ART A361 History of Graphic Design 3 Credits

History of graphic design emphasizing its beginnings to the present day including traditional and technological developments.

Registration Restrictions: Instructor permission

Prerequisites: ART A262 and WRTG A111 with a minimum grade of C.

ART A362 History of Modern Art 3 Credits

Historical development of art from the mid-19th century to the 1930s. Various visual arts are placed within the social and cultural contexts of this period.

Prerequisites: ART A262 and WRTG A111 with a minimum grade of C.

ART A363 History of Contemporary Art 3 Credits

Analysis of the work and thought of major artists in painting, sculpture, architecture, performance and installation art from post-World War II to the present. Examines the relationship of visual art to social and cultural trends during this period.

Prerequisites: ART A262 and WRTG A111 with a minimum grade of C.

ART A364 Italian Renaissance Art 3 Credits

Italian Renaissance art from the early Florentine period through the High Renaissance and Mannerist periods.

Prerequisites: ART A262 and WRTG A111 with a minimum grade of C.

ART A366 Asian Art 3 Credits

Visual arts of Asian culture, prehistoric to the present.

Prerequisites: ART A262 and WRTG A111 with a minimum grade of C.

ART A367 History of Photography 3 Credits

Investigates the history of photography: its origins, chronology, cultural context, and the significant contributions of individual photographers.

Prerequisites: ART A262 and WRTG A111 with a minimum grade of C.

ART A370 Intermediate Alaska Native Art 3 Credits

Explores unique methods of indigenous production and the cultural heritage through visiting elders/artists workshops and presentations. Applies techniques, design principles, and materials of the visiting elders/artists to course projects as a point of departure to develop a personal aesthetic and creative approach to making carved objects.

May Be Stacked With: ART A270 and ART A470

Prerequisites: ART A270 with a minimum grade of C.

ART A376 CAD for the Arts 3 Credits

Concepts and techniques of 2D and 3D computer-aided drafting. Details language and commands shared by most CAD packages with a focus on technical drawings for layout, design, and 3D computer drafting and modeling techniques, with applications to scenic, lighting, and 3D studio arts.

Crosslisted With: THR A376.

Prerequisites: ART A357 or THR A141.

ART A390 Selected Topics in Studio Art 3 Credits

Selected topics in studio art allowing for concentrated study in a specific area.

Special Note: Prerequisites may vary with the different studio topics.

May be repeated for credit in different studio topics for a maximum of 9 credits.

Registration Restrictions: Instructor permission and 6 credits of upper division coursework in same studio discipline.

May Be Stacked With: ART A490

ART A401 Advanced Handbuilt Ceramics 3 Credits

Covers functional ceramics, vessel forms and sculptural ceramics. Focus is on the ceramic process as a vehicle for personal creative expression.

Special Note: May be repeated once for credit.

Registration Restrictions: Instructor permission

May Be Stacked With: ART A201 and ART A301

Prerequisites: ART A111 and ART A211 and ART A301.

ART A402 Advanced Wheelthrown Ceramics 3 Credits

Covers functional wheelthrown ceramics and the vessel form. Focus is on the ceramic process in a variety of firing temperatures as a vehicle for personal creative expression.

Special Note: May be repeated once for credit.

Registration Restrictions: Instructor permission

May Be Stacked With: ART A202 and ART A302

Prerequisites: ART A111 and ART A211 and ART A302.

ART A405 Experimental Drawing 3 Credits

Integrates the development of ideas and personal iconography through experimentation with contemporary techniques and materials in drawing.

Special Note: May be repeated once for credit.

Registration Restrictions: Prerequisite(s) or instructor approval

Prerequisites: ART A205 with a minimum grade of C.

ART A407 Life Drawing and Composition II 3 Credits

Drawing from live models to explore advanced possibilities in design, composition and media. Emphasizes form and space using wet and dry media: charcoal, graphite, pen, brush, etc. Special emphasis on conceptual drawing concerns.

Special Note: May be repeated once for credit.

Registration Restrictions: Prerequisite(s) or instructor approval

May Be Stacked With: ART A307

Prerequisites: ART A307 with a minimum grade of C.

ART A411 Advanced Sculpture 3 Credits

Exploration of concepts and processes emphasizing aesthetics and history of contemporary sculpture. Continued development of construction skills with access to more advanced machines, tools, and welding equipment.

Special Note: May be repeated once for credit.

Registration Restrictions: Instructor permission.

May Be Stacked With: ART A211 and ART A311

Prerequisites: ART A311.

ART A412 Advanced Watercolor 3 Credits

Continued investigation of more advanced watercolor techniques and approaches regarding conceptual/pictorial constructions. Encourages experimentation, research and technical approaches.

Special Note: May be repeated once for credit with substantive change in media or emphasis.

May Be Stacked With: ART A312

Prerequisites: ART A312.

ART A413 Advanced Painting 3 Credits

Development of advanced painting techniques. Focus on complex concepts and pictorial constructions including research and experimentation in various media.

Special Note: May be repeated once for credit.

Registration Restrictions: Instructor permission

May Be Stacked With: ART A213, ART A313 and ART A414

Prerequisites: ART A313.

ART A414 Senior Painting Projects 3 Credits

Expansion of individual ideas and concepts through continued experimentation and research in painting techniques and methodologies. Focus on developing a cohesive body of work.

Special Note: May be repeated once for credit.

Registration Restrictions: Instructor permission

May Be Stacked With: ART A213, ART A313 and ART A413

Prerequisites: ART A413.

ART A415 Advanced Printmaking 3 Credits

Continued development in major printmaking processes including lithography, serigraphy, intaglio and relief. Explores connections between various printmaking disciplines and contemporary practices, especially digital development and production of one-of-a-kind projects. Development of individual creative concepts and experimentation in image making is expected. Interdisciplinary approaches encouraged.

Special Note: May be repeated three times for credit with change of printmaking process.

Registration Restrictions: Instructor permission

May Be Stacked With: ART A215 and ART A315

Prerequisites: ART A315.

ART A424 Advanced Photography 3 Credits

Investigates advanced level techniques and conceptual approaches in digital photography. Encourages exploration of diverse approaches in photography for artistic expression and creation of a cohesive professional photographic portfolio.

Special Note: May be repeated once for credit.

May Be Stacked With: ART A324

Prerequisites: ART A324 with a minimum grade of C.

ART A452 Advanced Graphic Design 3 Credits

Applied, creative and collaborative projects in graphic design.

Special Note: May be once repeated for credit.

Registration Restrictions: Instructor permission

May Be Stacked With: ART A352

Prerequisites: ART A352.

ART A453 Illustration II 3 Credits

Applied problems in advanced illustration.

Special Note: May be repeated once for credit.

Registration Restrictions: Instructor permission

May Be Stacked With: ART A353

Prerequisites: ART A353.

ART A470 Advanced Alaska Native Art 3 Credits

Investigates at an advanced level the development of aesthetics involving indigenous and/or contemporary materials. Emphasizes research design and execution of works reflecting the Native personal experience. Elders/artists may vary from semester to semester.

Special Note: May be repeated up to three times.

May Be Stacked With: ART A270 and ART A370

Prerequisites: ART A370 with a minimum grade of C.

ART A490 Selected Topics in Studio Art 3 Credits

Selected topics in studio art allowing for advanced concentrated study in a specific area.

Special Note: Prerequisites may vary with the different studio topics. May be repeated for credit in different studio topics for a maximum of 9 credits.

Registration Restrictions: Instructor permission and 6 credits of upper division coursework in same studio discipline.

May Be Stacked With: ART A390

ART A491 Senior Seminar 3 Credits

Integrates applied knowledge and professional technical practices of visual artists. Develops the necessary communication skills to be a practicing artist. Employs effective art historical, aesthetic and critical tools to resolve and assess creative problem-solving approaches.

Registration Restrictions: Instructor permission, senior status and completion of GER Tier 1 (basic college-level skills) courses.

Prerequisites: ART A261 and ART A262 and WRTG A111 with a minimum grade of C and PHIL A401.

Attributes: UAA Integrative Capstone GER.

ART A492 Art History Seminar 3 Credits

Seminar in art history.

Special Note: May be repeated three times for credit in different topics for a maximum of 12 credits.

Registration Restrictions: Instructor permission

Prerequisites: (ART A261 or ART A262 or ART A360A or ART A360B) and WRTG A111 with a minimum grade of C.

ART A495 Practicum 1-3 Credits

Management and operation of art studio for advanced student seeking an art career. Gain hands-on skills in organization of materials and the physical environment. Some working supervision of students.

Special Note: A total of 6 credits may be applied to an art degree.

Registration Restrictions: Instructor permission and a minimum of 3 credits of 400-level coursework in selected content area and approval of area coordinator.

ART A498 Individual Research 1-3 Credits

Individual art research focusing on professional development, conceptual growth and awareness, critical thinking, and advanced technical proficiency in any of the major disciplines.

Special Note: A total of 6 credits may be applied toward an Art degree.

Registration Restrictions: Instructor permission and minimum of 6 credits upper division studio coursework in selected studio area and approval of area coordinator.

ART A499 Thesis 3 Credits

Student will produce and exhibit a body of work based on an approved thesis proposal. Exhibition of work will be in designated group show.

Special Note: Offered spring semester only.

Registration Restrictions: Declared major in BFA in Art and approval of BFA committee.

Prerequisites: ART A491.

Astronomy (ASTR)

Courses

ASTR A103 Solar System Astronomy 3 Credits

Introduction to solar system astronomy; emphasis on most recent results from space research. History of astronomy, instruments, planetary motion, physical properties of planets, satellites, comets, and solar system evolution.

Registration Restrictions: High school algebra and trigonometry or equivalent.

Corequisites: ASTR A103L.

Attributes: UAA Natural Sciences GER.

ASTR A103L Solar System Astronomy Laboratory 1 Credit

Introductory astronomy laboratory with experiments in basic observational methods and data analysis applicable to the study of the solar system.

Registration Restrictions: High school algebra and trigonometry or equivalent.

Corequisites: ASTR A103.

Attributes: UAA Natural Sci Lab Only GER.

ASTR A104 Stars, Galaxies and Cosmology 3 Credits

Introduction to solar, stellar, galactic, extragalactic astronomy. Stars, clusters, galaxies, stellar evolution, the universe as a whole, and cosmology.

Registration Restrictions: High school algebra and trigonometry or equivalent.

Corequisites: ASTR A104L.

Attributes: UAA Natural Sciences GER.

ASTR A104L Stars, Galaxies and Cosmology Laboratory 1 Credit

Introductory astronomy laboratory with experiments in basic observational methods and data analysis applicable to the study of the Sun, stellar, galactic, and extragalactic astronomy.

Registration Restrictions: High school algebra and trigonometry or equivalent.

Corequisites: ASTR A104.

Attributes: UAA Natural Sci Lab Only GER.

ASTR A365 Astrobiology 3 Credits

A comprehensive examination of the possibility of the existence of life (microbial and advanced) outside of the Earth, the probability of discovery of extraterrestrial life (methods of planet detection, chemical signatures of microbial life, and contact with advanced life), and the scientific and cultural implications of such a discovery. Includes the study of star and planet formation rates, habitability zones, origin of life, evolution, and formation of intelligence.

Registration Restrictions: Junior standing; completion of all GER Tier 1 (basic college-level skills) courses.

Crosslisted With: BIOL A365

Prerequisites: BIOL A108 and (PHYS A123 or PHYS A211).

Attributes: UAA Integrative Capstone GER.

Auto/Diesel Technology (ADT)

Courses

ADT A071 Fundamentals of Diesel Engines 2 Credits

Survey of different types, uses, operating conditions, and maintenance of diesel engines. Kodiak College

ADT A102 Introduction to Automotive Technology 3 Credits

Provides career information about the automotive industry. Covers shop safety, hand tools, fasteners, fittings and an introduction to the major automotive systems.

ADT A121 Basic Electrical Systems 3 Credits

Covers basic automotive and heavy-duty equipment electrical theory, diagnosis, minor repair, and general service of alternators, starters, and batteries.

Special Note: Students are expected to provide the basic hand tools needed to participate in lab activities. See faculty advisor for tool list.

Prerequisites: ADT A102 with a minimum grade of C or concurrent enrollment.

ADT A122 Engine Theory and Diagnosis 3 Credits

Introduces the fundamental aspects of engine theory, design, operation, general diagnosis and engine-related service. Includes an introduction of combustion process, engine mechanics and associated engine systems.

Prerequisites: ADT A102 with a minimum grade of C or concurrent enrollment.

ADT A131 Auto Electrical II 3 Credits

Theory, diagnosis and repair of automotive and heavy-duty electrical systems, to include testing tools, schematics, and computer inputs and outputs.

Prerequisites: ADT A102 with a minimum grade of C or concurrent enrollment and ADT A121 with a minimum grade of C or concurrent enrollment.

ADT A140 Automotive Engine Repair 3 Credits

Apply skills essential to diagnose, repair, overhaul, and recondition automotive internal combustion engines. Includes cylinder head, valve train, and engine block service, as well as starting and running the engine.

Special Note: A running engine is imperative in industry. Lab engines must run in order to receive a passing grade.

Prerequisites: ADT A102 with a minimum grade of C or concurrent enrollment.

ADT A150 Brake Systems 4 Credits

Theory, diagnosis and repair of automotive braking systems, including antilock brake systems (ABS).

Prerequisites: ADT A102 with a minimum grade of C or concurrent enrollment and ADT A121 with a minimum grade of C or concurrent enrollment and ADT A131 with a minimum grade of C or concurrent enrollment.

ADT A152 Heavy-Duty Suspension and Steering 4 Credits

Introduces theory, operation and maintenance of suspension and steering systems on medium- and heavy-duty trucks and equipment.

Special Note: Students are expected to provide the basic hand tools needed to participate in lab activities. See faculty advisor for tool list.

Prerequisites: ADT A102 with a minimum grade of C or concurrent enrollment.

ADT A153 Medium/Heavy-Duty Diesel Engines 4 Credits

Introduces theory and application of design, operation, diagnosis, disassembly, repair, and service procedures for engines used in medium and heavy-duty trucks and equipment.

Special Note: Students are expected to provide the basic hand tools needed to participate in lab activities. See faculty advisor for tool list.

Prerequisites: ADT A102 with a minimum grade of C or concurrent enrollment.

ADT A155 Heavy-Duty Brake Systems 4 Credits

Introduces theory, operation, diagnosis, repair and service procedure of brake systems on medium- and heavy-duty trucks and equipment.

Special Note: Students are expected to provide the basic hand tools needed to participate in lab activities. See faculty advisor for tool list.

Registration Restrictions: Completion of ADT A121 and ADT A131 with a minimum grade of C or concurrent enrollment is recommended.

Prerequisites: ADT A102 with a minimum grade of C or concurrent enrollment.

ADT A156 Heavy-Duty Maintenance and Inspection 3 Credits

Introduces regulations and inspection/maintenance procedures on medium- and heavy-duty trucks and equipment.

Special Note: Students are expected to provide the basic hand tools needed to participate in lab activities. See faculty advisor for tool list.

Registration Restrictions: Must be eligible to enroll in WRTG A090 and MATH A055.

Prerequisites: ADT A102 with a minimum grade of C or concurrent enrollment.

ADT A160 Manual Drive Trains and Axles 4 Credits

Introduces theory, diagnosis, and repair of manual drive train components and drive axles. Content includes clutches, manual transmissions and transaxles, 4-wheel drive components, and drive axles.

Prerequisites: ADT A102.

ADT A162 Suspension and Alignment 4 Credits

Modern automotive suspension, alignment, and steering theory, inspection, service, and adjustments including four wheel alignment.

Prerequisites: ADT A121.

ADT A195 Automotive Practicum I 1-6 Credits

Provides supervised workplace experience in selected industry settings. Integrates knowledge and practice of competencies gained in program coursework.

Special Note: May be repeated for a maximum of 18 credits.

Registration Restrictions: Recommendation by faculty advisor, at least 12 credits of advisor-approved ADT program technical courses and a valid Alaska driver's license.

ADT A202 Auto Fuel and Emissions Systems 4 Credits

Presents combustion chemistry, volumetric efficiency, design and function of emission control devices, laws and regulations concerning vehicle emissions. Emphasis on interfacing with on-board computers, automotive computer networking, and 4- and 5-gas analysis.

ADT A222 Automotive Engine Performance 3 Credits

Presents strategies for diagnosing fuel and ignition systems, manifold design, superchargers, automotive computers and multiplexing, communication strategies, on-board diagnostics, testing and diagnosis of engine performance related components.

Prerequisites: ADT A122.

ADT A225 Mobile Heating, Ventilation and Air Conditioning Systems 3 Credits

Presents theory, operation, diagnosis and repair of heating, ventilation and air conditioning (HVAC) systems used in automotive and heavy-duty applications.

Prerequisites: ADT A131 with a minimum grade of C.

ADT A227 Auto Electrical III 3 Credits

Studies the description, operation and diagnosis of automotive and heavy duty computerized systems. Covers the study of computer inputs, outputs, networks, and programming; including advanced lighting, sensors, instrument cluster gauges, accessories, safety systems, and security systems as well as several other computer control systems and networks.

Special Note: Digital Volt Ohm Meter (DVOM) and test light required.

Prerequisites: ADT A131.

ADT A260 Electronic and Automatic Transmissions 3 Credits

Applies theory, diagnosis, and repair of modern automatic transmissions, including application devices, friction materials, seals, gaskets, electronic controls, adaptive strategies, and valve bodies.

Prerequisites: ADT A131.

ADT A267 Heavy-Duty Diesel Engine Performance 4 Credits

Covers design, operation, diagnosis, repair and service procedures of engines, fuel systems and emissions systems on engines used in the medium- and heavy-duty diesel industry. Emphasizes engine performance and computer systems diagnosis.

Special Note: Students are expected to provide the basic hand tools needed to participate in lab activities. See faculty advisor for tool list.

Prerequisites: ADT A131 with a minimum grade of C and ADT A153 with a minimum grade of C.

ADT A268 Mobile Hydraulic Systems 4 Credits

Includes diagnosis, repair and service of hydraulic systems and components used on medium- and heavy-duty equipment.

Special Note: Students are expected to provide the basic hand tools needed to participate in lab activities. See faculty advisor for tool list.

Registration Restrictions: Students are strongly encouraged to complete ADT A121 and ADT A131 prior to enrolling in this course.

Prerequisites: ADT A102 with a minimum grade of C.

ADT A269 Heavy-Duty Drive Trains 3 Credits

Includes design, operation, diagnosis, repair and service procedures for transmissions and drive trains used in medium- and heavy-duty applications.

Special Note: Students are expected to provide the basic hand tools needed to participate in lab activities. See faculty advisor for tool list.

Registration Restrictions: Completion or concurrent enrollment in ADT A156 is strongly recommended.

Prerequisites: ADT A102 with a minimum grade of C or concurrent enrollment.

ADT A295 Automotive Practicum II 3 Credits

Provides experience in selected industry settings for students nearing the completion of a program in the Automotive and Diesel Technology Department at UAA.

Special Note: Most practicum sites will require a valid Alaska driver's license and personally owned tools.

Registration Restrictions: A minimum of 24 ADT credits completed, a minimum grade of C or higher for all ADT courses, and advisor approval. Enrollment in this course is restricted to admitted majors in Automotive and Diesel Technology. Instructor approval is required.

Aviation Maint Tech (AMT)

Courses

AMT A170 Aircraft Ground Operations and Safety 1 Credit

Examines safety in aviation maintenance including aircraft ground operation and fuel servicing. Presents policies and procedures of the Aviation Maintenance Technology Program, UAA and the FAA.

Registration Restrictions: Formal acceptance into the AMT certificate or degree program.

AMT A171 Basic Aerodynamics 3 Credits

Introduces the theory of aerodynamics and factors affecting flight of heavier than air fixed and rotary wing aircraft. Emphasizes aircraft weight and balance, aircraft structures, aerodynamics, theory of flight and aircraft rigging.

Registration Restrictions: Formal acceptance into the AMT certificate or degree program.

AMT A172 Aircraft Publications, Regulations and Records 3 Credits

Examines the government's involvement in aviation maintenance, and FAA regulations regarding aviation maintenance and approved training programs. Emphasizes the use of maintenance publications, maintenance forms and records, and technicians' privileges and limitations.

Registration Restrictions: Formal acceptance into the AMT certificate or degree program.

AMT A174 Fundamentals of Aircraft Electronics 3 Credits

Examines the theory, derivation, and application of basic DC and AC electrical concepts, definitions, and laws. Introduces passive electrical components, electrical sources, AC waveforms, schematic symbols, and electrical wiring diagrams. Explains troubleshooting fundamentals and circuit analysis of both passive and reactive components.

Prerequisites: MATH A055.

Corequisites: AMT A174L.

AMT A174L Fundamentals of Aircraft Electronics Lab 2 Credits

Introduces the methods of safe and accurate measurement of DC and AC electrical quantities using basic electrical test equipment. Connecting, testing, and operating a variety of DC and AC circuit components, troubleshooting defective components, observing the characteristics of electrical components in test circuits, and wiring circuits from schematic diagrams.

Prerequisites: MATH A055 and AMT A170 or concurrent enrollment.

Corequisites: AMT A174.

AMT A175 Drawing and Precision Measurement 2 Credits

Examines the theory and techniques involved in making and reading aircraft drawings and blueprints. Introduces precision measurement techniques and practice, and the use of blueprint information.

Registration Restrictions: Formal acceptance into the AMT certificate or degree program.

AMT A176 Aircraft Materials and Processes I 2 Credits

Introduces aircraft cleaning, corrosion control, materials, and aircraft hardware. Covers the selection of appropriate cleaning chemicals and processes. Describes the identification, selection, and installation of aircraft hardware, fluid lines, and fittings. Examines the performance of aircraft processes such as heat treating and hardness testing.

Registration Restrictions: Formal acceptance into the AMT certificate or degree program.

Prerequisites: AMT A170 or concurrent enrollment.

AMT A177 Reciprocating Engine Theory 2 Credits

Introduces the theory of operation and construction of the internal combustion engine. Examines the combustion processes, design rationale, cooling and lubrication of internal combustion of reciprocating engines.

Registration Restrictions: Formal acceptance into the AMT certificate or degree program.

AMT A178 Turbine Engine Theory 2 Credits

Examines the construction and operation of turbine engines. Introduces thrust development and design and environmental factors that influence thrust, along with construction details from inlet to exhaust for representative aircraft turbine engines.

Registration Restrictions: Formal acceptance into the AMT certificate or degree program.

AMT A181 Aircraft Fuel Systems 3 Credits

Examines aircraft fuels, fuel/air mixtures, basic fuel systems and fuel metering devices. Introduces the application of fuels, metering systems, tanks, valves, fuel lines, carburetors, fuel injection systems, turbochargers, and superchargers utilized in a variety of modern aircraft.

Prerequisites: AMT A176.

Corequisites: AMT A181L.

AMT A181L Aircraft Fuel Systems Lab 1 Credit

Examines the identification, handling, inspection, servicing, and troubleshooting aircraft fuels, basic fuel systems, and fuel metering devices, including complex aircraft systems, tanks, valves, fuel lines, carburetors, fuel injection systems, turbo-chargers, and superchargers.

Prerequisites: AMT A170 and AMT A176.

Corequisites: AMT A181.

AMT A185 Aircraft Sheetmetal Structures 3 Credits

Introduces sheetmetal, its properties, and uses in fabrication of structural and nonstructural components of aerospace vehicles. Inspection techniques are addressed along with fabrication and repair processes of bending, cutting, forming, drilling, and riveting aluminum sheetmetal parts.

Prerequisites: AMT A176.

Corequisites: AMT A185L.

AMT A185L Aircraft Sheetmetal Structures Lab 2 Credits

Examines the inspection, fabrication, and repair of aircraft sheetmetal structures including the processes of bending, cutting, forming, drilling, and riveting aluminum sheetmetal parts.

Prerequisites: AMT A170 and AMT A176.

Corequisites: AMT A185.

AMT A186 Aircraft Non-Destructive Inspection Methods 3 Credits

Introduces the selection and use of appropriate non-destructive testing methods commonly employed in the aircraft industry such as visual, dye penetrant, magnetic particle, eddy current, and ultrasound.

Prerequisites: AMT A170.

AMT A187 Aircraft Reciprocating Engine Overhaul 3 Credits

Introduces the overhaul practices for aircraft internal combustion engines. Includes disassembly, cleaning, non-destructive testing, measurement, lubrication and assembly of engines.

Prerequisites: AMT A175 and AMT A177.

Corequisites: AMT A187L.

AMT A187L Aircraft Reciprocating Engine Overhaul Lab 2 Credits

Provides practice in the performance of overhaul of aircraft internal combustion engine. Describes disassembly, cleaning, non-destructive testing, measurement, lubrication and assembly of internal combustion engine.

Prerequisites: AMT A170 and AMT A175.

Corequisites: AMT A187.

AMT A272 Aircraft Electrical Hardware and Systems 3 Credits

Examines the operation, application, servicing, and installation practices of aircraft electrical components such as switches, relays, fuses, other circuit protection devices, wires, and connectors. Describes components such as aircraft batteries, power generators (DC and AC), and aircraft electrical distribution systems. Details the methods used in testing, inspecting, and troubleshooting these components.

Prerequisites: AMT A174 and AMT A174L.

AMT A273 Aircraft Fluid Power Systems 2 Credits

Introduces fluid power and the application of pressure, force, area, volume, flow and speed, and function of fluid power in aircraft systems. Examines fluids, seals, hoses, tubing, connections, component identification and function, inspection, installation, and overhaul. Explores system operation, inspection, and troubleshooting for hydraulic, pneumatic, and landing gear systems.

Prerequisites: AMT A176.

Corequisites: AMT A273L.

AMT A273L Aircraft Fluid Power Systems Lab 2 Credits

Examines the identification, installation operation, and servicing of fluid power systems and components such as fluids, seals, hoses, tubing, connections, pumps, valves, regulators, filters, reservoirs, and actuators. Analyses of system operation, inspection, and troubleshooting are included for hydraulic, pneumatic, and landing gear systems.

Prerequisites: AMT A176.

Corequisites: AMT A273.

AMT A274 Aircraft Electronic Systems 5 Credits

Examines the use of mechanical and electronic systems in sensing, communicating, and displaying information, along with solid state and digital devices, sensors, and special circuits used in instrumentation systems on aircraft. Analyzes the methods used in testing, inspecting, and troubleshooting those systems.

Prerequisites: AMT A174.

Corequisites: AMT A274L.

AMT A274L Aircraft Electronic Systems Lab 1 Credit

Provides practice in creating, operating, testing, and analyzing solid state and digital devices, sensors, and special circuits used in instrumentation systems and the mechanical and electrical systems used in sensing, communicating, and displaying information in aircraft.

Prerequisites: AMT A174L.

Corequisites: AMT A274.

AMT A279 Aircraft Turbine Engine Repair and Overhaul 3 Credits

Examination of turbine engine construction details and engine support systems. Examination of operational characteristics and the procedures and practices used to repair or overhaul typical aircraft turbine systems.

Prerequisites: AMT A175 and AMT A178.

Corequisites: AMT A279L.

AMT A279L Aircraft Turbine Engine Repair and Overhaul Lab 1 Credit

Examines practices involved in the disassembly, assembly, inspection and repair of aircraft turbine engines. Emphasizes the use of technical data, appropriate tools and inspection devices along with special safety procedures related to the servicing, operation and repair of turbine engines.

Prerequisites: AMT A175 and AMT A178.

Corequisites: AMT A279.

AMT A282 Aircraft Propeller Systems 1 Credit

Examines the installation, operation, inspection, performance testing, and troubleshooting of aircraft propeller systems.

Prerequisites: AMT A177 and AMT A178.

AMT A283 Aircraft Auxiliary Systems 3 Credits

Examines the operation, maintenance, servicing, and troubleshooting of auxiliary systems on aircraft. Details the environmental control systems (heat, air conditioning, pressurization, oxygen), ice and rain control systems, instrumentation, fire protection, and associated indicating and warning systems of commuter and transport category aircraft.

Prerequisites: AMT A274 and AMT A274L.

Corequisites: AMT A283L.

AMT A283L Aircraft Auxiliary Systems Lab 1 Credit

Examines the operation, maintenance, servicing, inspection, and troubleshooting of auxiliary systems on aircraft. Skill building practice is provided in operating, servicing, and troubleshooting systems using system schematics, wiring diagrams, and maintenance information.

Prerequisites: AMT A274 and AMT A274L.

Corequisites: AMT A283.

AMT A284 Aircraft Electrical Machinery 2 Credits

Examines the construction, operation, inspection, servicing, and repair of aircraft electrical components such as electric motors, generators, alternators, voltage controls, magnetos, and ignition system components.

Prerequisites: AMT A272.

Corequisites: AMT A284L.

AMT A284L Aircraft Electrical Machinery Lab 2 Credits

Application of practices in inspecting, servicing, operation, testing, and repair of electrical components such as electrical motors, DC generators, DC alternators, AC alternators, voltage regulators, reverse current relays, generator and alternator protection devices, magnetos, and ignition system components.

Prerequisites: AMT A272.

Corequisites: AMT A284.

AMT A285 Aircraft Bonded Structures 4 Credits

Examines the theory of and techniques used in the fabrication, inspection, repair, and finishing of bonded structures, plastics, wood structures, fabric covering, honeycomb structures, and advanced composite structures.

Prerequisites: AMT A176.

Corequisites: AMT A285L.

AMT A285L Aircraft Bonded Structures Lab 1 Credit

Provides practice in the fabrication, inspection, and repair of bonded structures including plastics, fabric covering, honeycomb structures, advanced composite structures, and painting.

Prerequisites: AMT A176.

Corequisites: AMT A285.

AMT A286 Aircraft Materials and Processes II 2 Credits

Examines the theory of and techniques used in the repair of aircraft steel structures, and certain aluminum, magnesium, and titanium components.

Prerequisites: AMT A176.

AMT A287 Reciprocating Engine Installation and Operation 3 Credits

Provides an in-depth study of the installation, operation, and inspection of aircraft reciprocating engines. Examines the application of performance testing and troubleshooting practices commonly used to diagnose and correct aircraft engine problems.

Prerequisites: AMT A181 and AMT A187.

Corequisites: AMT A287L.

AMT A287L Reciprocating Engine Installation and Operation Lab 2 Credits

Provides practice in the installation, operation and inspection of aircraft reciprocating engines. Details the application of performance testing and troubleshooting practices commonly used to diagnose and correct aircraft engine problems.

Prerequisites: AMT A181L and AMT A187L.

Corequisites: AMT A287.

AMT A289 Turbine Engine Installation and Operation 3 Credits

Provides an in-depth study of the installation, operation and inspection of aircraft turbine engines. Examines the application of performance testing and troubleshooting practices commonly used to diagnose and correct aircraft engine problems.

Prerequisites: AMT A181 and AMT A279.

Corequisites: AMT A289L.

AMT A289L Turbine Engine Installation and Operation Lab 2 Credits

Provides practice in the installation, operation, and inspection of aircraft turbine engines. Details the application of performance testing and troubleshooting practices commonly used to diagnose and correct aircraft engine problems.

Prerequisites: AMT A181L and AMT A279L.

Corequisites: AMT A289.

AMT A364 Aircraft Avionics Systems 3 Credits

Examines the fundamentals of design, installation, operation, testing, and maintenance of airborne communication, navigation, instrument, and auto flight systems.

Prerequisites: AMT A274.

AMT A369 Airframe Assembly and Inspections 3 Credits

Examines the procedures and rules for performance of scheduled and non-scheduled aircraft inspections and evaluation of the condition of aircraft and their systems to determine air worthiness. Details aircraft disassembly, balancing, reassembly, weight and balance, and the procedures for rigging structural assemblies and flight control systems. Students will conduct research on regulations and conformity data; plan and perform inspections, then analyze and record findings.

Prerequisites: AMT A185 and AMT A272.

Corequisites: AMT A369L.

AMT A369L Airframe Assembly and Inspections Lab 2 Credits

Provides practice in the performance of scheduled and non-scheduled aircraft inspections. Includes practice in the performance of jacking and weighing of aircraft and disassembly, balancing, reassembly, and rigging of aircraft assemblies and flight controls, researching data, inspecting systems and components, evaluating the condition of aircraft and systems to determine air worthiness, recording findings in maintenance records.

Prerequisites: AMT A185L and AMT A272.

Corequisites: AMT A369.

Aviation Tech/Admin/Mgmt (ATA)

Courses

ATA A102 Introduction to Aviation Technology 3 Credits

Introduces all aspects of the aviation transportation industry, including general aviation, airlines, airports, aircraft manufacturing, and government organizations. Emphasizes career opportunities and career paths, certification and job qualifications, concepts and responsibilities of an aviation professional, and self-assessment.

ATA A102A Introduction to Aviation Technology A 2 Credits

Introduction to aviation academic life and expectations in the aviation industry. Provides foundational knowledge of the aviation industry.

ATA A102B Introduction to Aviation Technology B 1 Credit

Explores the various segments of aviation. Provides an overview of many of the employment opportunities available within the aviation industry.

ATA A132 History of Aviation 3 Credits

Traces aviation history with particular emphasis on manned-powered flight. Emphasizes the Golden Age of Flight (1900-1945) and the Jet Age (1945-present).

ATA A133 Aviation Law and Regulations 3 Credits

Overviews the U.S. legal system, origin of laws (national and international) influencing aviation, case studies of aviation litigation, and organization, authority, responsibility, and/or functions of the government or non-government entities that regulate or influence modern aviation.

ATA A134 Principles of Aviation Administration 3 Credits

Introduces business administration in general with an aviation focus. Emphasizes the theories of corporate organization and management. Examines trends in aviation administration.

ATA A233 Aviation Safety 3 Credits

Surveys aviation safety to identify primary causes of aviation accidents. Introduces the process of developing and evaluating safety programs. Examines the roles of the National Transportation Safety Board, other appropriate agencies and future concepts in aviation safety.

Prerequisites: ATA A102 or ATC A147 or concurrent enrollment.

ATA A295 Aviation Internship I 1-3 Credits

Provides generalized aviation-related work experiences for the purpose of introducing students to the aviation industry. Students are supervised by aviation industry professionals and program faculty.

Special Note: Open entry/open exit. Students must apply to the Aviation Technology Division to coordinate placement prior to course enrollment.

Registration Restrictions: Grade of C or better in 12 credits of Aviation Technology-related classes. Department permission required. Proof of accident insurance required.

ATA A331 Human Factors in Aviation 3 Credits

Covers the following aspects of human factors: the meaning of human factors, human error, body rhythms and sleep, fitness and performance, vision and visual illusions, motivation and speech, attitudes and persuasion, training and training devices, documentation, displays and controls, space and layout, the aircraft cabin, and its human payload.

Prerequisites: ATA A233 with a minimum grade of C.

ATA A335 Airport Operations 3 Credits

Examines the management and operation of civil airports. Emphasizes master planning, Federal Aviation Regulations dealing with airport operations, environmental issues, land use planning, airport capacity delay and access factors, economics impacts, financial analyses and budgeting systems, security, liability, maintenance, professional qualification, and public relations.

Registration Restrictions: Junior standing

Prerequisites: ATA A102 and ATA A134.

ATA A336 Air Service Operations 3 Credits

Assesses functions of air service operations. Analyzes organization, financing, revenues and expenses, construction, expansion, safety, and relations with local agencies, including airport management.

Registration Restrictions: Junior standing

Prerequisites: ATA A102 and ATA A134.

ATA A337 Airline Operations 3 Credits

Analyzes airline organization and management, including classifications, management methods, governmental relationships, and financial positions. Examines airline operations, market research, demand determination, and effects of FAA regulations.

Prerequisites: ATA A102 and ATA A134.

ATA A415 Company Resource Management 3 Credits

Examines Company Resource Management (CRM) principles and programs in various aviation employment settings, such as piloting, air traffic control, management, and aviation maintenance. Examines how to evaluate human perceptions and the decision-making process in the aviation environment to develop CRM training programs applicable in various aviation employment settings.

Prerequisites: ATA A331.

ATA A425 Civil Aviation Security 3 Credits

Analyzes applicable civil aviation transportation security regulations and policy; assesses security risks and formulates potential intervention, prevention, or enhancement plans using current and developing technology.

Registration Restrictions: Upper-division standing

ATA A431 Aircraft Accident Investigation 3 Credits

Provides a comparative examination of elements and issues used in a field and laboratory investigation of an aircraft accident. Focuses on the application of relevant course material to research, discover, and analyze facts used to determine the probable cause of an aircraft accident and develop corrective action to prevent recurrence.

Prerequisites: ATA A233 and ATA A331.

ATA A490 Advanced Topics in Aviation Technology 1-6 Credits

Provides advanced theoretical and/or experiential learning in all areas of Aviation Technology (aviation maintenance, professional piloting, aviation administration, and air traffic control). Specific course content is determined by current industry trends and student needs. Emphasizes the following applications to current technical information: analysis, evaluation and synthesis.

Special Note: A maximum of 6 credits may be applied toward the BSAT degree. May be repeated for credit under different topic.

Registration Restrictions: Department permission

ATA A492 Air Transportation System Seminar 3 Credits

Analyzes and evaluates current events, issues, globalization, and emerging technologies in the air transportation industry, emphasizing present and future implications for the industry. Integrates technical, business, and general education knowledge to complete research and project assignments.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses. Junior standing and division approval required.

Prerequisites: ATA A337 with a minimum grade of C.

Attributes: UAA Integrative Capstone GER.

ATA A495 Aviation Internship II 1-3 Credits

Provides specialized aviation-related work experiences pertinent to educational program and future employment objectives. Overseen by aviation industry professional and program faculty. Complete a major industry project specific to student's area of scholastic preparation.

Special Note: Open entry/open exit. Students must apply to the Aviation Technology Division to coordinate placement prior to course enrollment.

Registration Restrictions: Minimum grade of C required in 12 credits of Aviation Technology-related classes. Department permission required. Proof of accident insurance required. Junior standing required.

ATA A603 Human Error Analysis in Aviation 3 Credits

Provides an in-depth examination of human error and its implications in the realm of aviation safety. The course will include a review of, and present techniques for addressing, human error. Developing intervention strategies for a simulated organization and presenting findings and recommendations.

Registration Restrictions: Graduate standing or instructor approval.

ATA A604 Safety Management Systems in Aviation 3 Credits

Provides a theoretical foundation and application of Safety Management Systems (SMS) in aviation. The course examines each of the components associated with SMS used in aviation and students will develop a generic framework that can be modified to fit any aviation organization. The exploration will also include the refinement of current SMS as well as the development of a safety management policy and assurance techniques.

Registration Restrictions: Graduate standing or instructor approval.

Prerequisites: ATA A603.

ATA A690 Selected Topics in Aviation 3 Credits

Provides advanced theoretical and applied learning in all areas of the Aviation Technology Division (aviation maintenance, professional piloting, aviation administration and air traffic control). Specific course content is determined by current industry trends and identified issues. Emphasizes the following applications to current technical information: analysis, evaluation and synthesis.

Special Note: May be repeated for a maximum of 6 credits with change of subtitle.

Registration Restrictions: Graduate standing or instructor approval

Aviation Tech/Prof Piloting (ATP)

Courses

ATP A100 Private Pilot Ground School 3 Credits

Prepares students for FAA Private Pilot Knowledge Test. Includes basic aerodynamics, aircraft engine operation and flight instruments, navigation, weather information and dissemination services. Covers FAA regulations, the Aeronautical Information Manual, radio communication and navigation.

Special Note: Appropriate test score on English placement test. SAT Verbal section or ACT English test will waive the WRTG A110 prerequisite. Appropriate test score on mathematics placement test will waive the MATH A054 prerequisite.

Prerequisites: (WRTG A111 or WRTG A211 or WRTG A212 or WRTG A213 or WRTG A214 or WRTG A110 with a minimum grade of C or Enhanced ACT English with a score of 22 or Original ACT English with a score of 22 or ACT English with a score of 22 or SAT Critical Reading Score with a score of 530 or SAT Verbal Score with a score of 530 or SAT Verbal with a score of 530) and (MATH A054 with a minimum grade of C or MATH A055 or MATH A105 or MATH A121 or MATH A151 or MATH A152 or MATH A155 or MATH A221 or MATH A251 or MATH A252 or MATH A253).

ATP A101 Pre-Professional Flying 2 Credits

Provides beginning flight instruction for students intending to become professional pilots.

Special Note: Open-entry/open-exit. Three hours in Flight Training Device required.

Registration Restrictions: ATP A100 or concurrent enrollment, or passing score on Private Pilot Knowledge Test. Department approval required. FAA Student Pilot/Class II Medical Certificate required.

ATP A103 Part 61 Private Pilot 2 Credits

Provides beginning flight instruction for students intending to become professional pilots, receive their Federal Aviation Administration Private Pilot Certificate, or convert other certification to include a Airplane Single Engine Land.

Special Note: Open-entry/open-exit. Three hours in Flight Training Device required. This course does not apply toward the Restricted ATP certificate. Fees will vary based on an hourly fee.

Registration Restrictions: ATP A100 or concurrent enrollment or passing score on Private Pilot Knowledge Test. Department approval required. FAA Student Pilot and current FAA medical certificate required.

ATP A104 Flying Alaska Bush 3 Credits

Provides specialized discussion concerning unique flying conditions faced by Alaskan pilots. Covers basic aerodynamics, mountain flying, skis, floats, wheels, judgment of unimproved landing areas, characteristics of Alaskan weather, external loads, and emergency field maintenance.

Registration Restrictions: Private Pilot Certificate or higher rating.

ATP A116 Instrument Ground School 3 Credits

Provides preparation for the Federal Aviation Administration (FAA) Instrument Pilot Knowledge Test. Includes attitude instrument flying, air traffic control and navigation facilities, pilot responsibilities, Instrument Flight Rules (IFR), en route and approach navigation charts, airspace and airway route system.

Special Note: Two hours in a Flight Training Device (FTD) is required.

Registration Restrictions: FAA Private Pilot Certificate or equivalent.

ATP A126 Instrument Flying 2 Credits

Fulfills FAA flight training requirements for an instrument airplane rating under FAR Part 141.

Special Note: Open-entry/open-exit. Twelve hours in Flight Training Devices required.

Registration Restrictions: Meet course prerequisites or Private Pilot Certificate. Departmental approval required.

Prerequisites: ATP A101 and ATP A116 or concurrent enrollment.

ATP A200 Commercial Ground School 3 Credits

Provides preparation for the Federal Aviation Administration's Commercial Pilot Knowledge Test. Includes advanced studies of Private Pilot topics, high performance and complex aircraft, commercial flight maneuvers and commercial Federal Aviation Regulations.

Registration Restrictions: FAA Private Pilot Certificate or equivalent

ATP A218 Commercial Flying I 1.5 Credit

Provides flight training to review basic private pilot maneuvers and to introduce the advanced flight maneuvers required of a commercial pilot.

Special Note: Open-entry/open-exit.

Registration Restrictions: Private Pilot Certificate. Department approval required.

Prerequisites: ATP A126 and ATP A200 or concurrent enrollment.

ATP A219 Commercial Flying II 1.5 Credit

Provides flight training to build proficiency and experience in cross-country flying and night operations. Includes introduction to complex airplanes.

Special Note: Open-entry/open-exit.

Registration Restrictions: Department approval

Prerequisites: ATP A218.

ATP A220 Commercial Flying III 2 Credits

Develops proficiency required to pass the FAA Commercial Pilot Practical Flight Test.

Special Note: Open-entry/open-exit.

Registration Restrictions: Department approval required. Concurrent enrollment in ATP A305 is required for BSAT majors.

Prerequisites: ATP A219.

ATP A225 Tailwheel Airplane Transition 1 Credit

Intended for pilots wishing to transition from tricycle gear airplanes to tailwheel airplanes.

Special Note: Open-entry/open-exit.

Registration Restrictions: FAA Commercial Pilot Airplane Single-Engine Certificate

Prerequisites: ATP A220 with a minimum grade of C.

ATP A231 Search, Survival, and Rescue 3 Credits

Deals with situations that develop from lost or downed aircraft; survey of principles of survival in all types of climates, with emphasis on Arctic environments. Organization for search and rescue with emphasis on systems and operational methods used in Alaska.

Prerequisites: ATA A233.

ATP A232 Advanced Aviation Navigation 3 Credits

Examines the earth's surface and mapping methods, Low, High and International En Route navigation and approach charts. Also examines advanced navigation and flight display systems technology, the theory and operation of Global Positioning System (GPS) and Automatic Dependent Surveillance-Broadcast (ADS-B) navigation equipment. Course also looks at future trends in aeronautical navigation.

Prerequisites: ATP A116.

ATP A235 Elements of Weather 3 Credits

Defines weather elements and methods of measurement: composition of atmosphere, description of atmospheric processes and their movement, general circulation of atmosphere, wind and secondary circulation, weather reports and forecasts, and weather satellites.

ATP A251 Flight Dispatcher Overview 3 Credits

Provides an overview of the flight dispatcher profession, prepares students for the transition from the academic to vocational environment. Requires extensive study in meteorology, flight planning considerations and Federal Aviation Regulations used by dispatchers.

Prerequisites: ATP A100 and ATP A235 and (ATC A143 or ATP A116) and (ATC A144 or ATP A200) and (ATA A233 or ATC A325).

ATP A300 CFI Ground School 3 Credits

Prepares students for the Federal Aviation Administration (FAA) Certified Flight Instructor Knowledge Test. Includes principles of teaching and learning, analysis of student motivation, flight training syllabus, and the flight instructor's role and responsibilities. Covers performance and analysis of flight training maneuvers, advanced aerodynamics, fundamentals of instrument flight, flight training publications, and Federal Aviation Regulations (FARs).

Registration Restrictions: Departmental approval required.

ATP A301 CFI Flying 2 Credits

Fulfills Federal Aviation Administration (FAA) flight training requirements for obtaining a Certified Flight Instructor (CFI) certificate under Federal Aviation Regulations (FAR) Part 141.

Special Note: Open entry/open exit.

Registration Restrictions: FAA Commercial Pilot Certificate with Instrument Rating or equivalent. Departmental approval required.

Prerequisites: ATP A220 and ATP A300 or concurrent enrollment.

ATP A305 Airplane Multiengine Land Rating 2 Credits

Provides flight instruction for Professional Piloting students seeking the Federal Aviation Administration (FAA) Airplane Multiengine Land Rating.

Special Note: Open entry/open exit.

Registration Restrictions: Department approval

Prerequisites: ATP A220 or concurrent enrollment.

ATP A320 Flight Dynamics 3 Credits

Applies selected physical and mathematical principles to the analysis and prediction of aircraft performance. Presents general methods for analyzing and predicting aircraft performance in all flight regimes. Builds on knowledge introduced in previous pilot ground and flight courses, aviation weather courses, and science and mathematics courses.

Registration Restrictions: Junior or Senior standing. Departmental approval required.

Prerequisites: ATP A116 with a minimum grade of C and ATP A126 with a minimum grade of C and ATP A200 with a minimum grade of C and ATP A235 with a minimum grade of C and (MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C or MATH A155 with a minimum grade of C or MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C or MATH A252 with a minimum grade of C or MATH A253 with a minimum grade of C).

ATP A332 Transport Aircraft Systems 3 Credits

Describes and examines the components of transport aircraft systems, their design, performance, capabilities, limitations, interrelationships, and contribution to the operation, safety, efficiency and economy of the aircraft.

Prerequisites: ATP A200.

ATP A351 Flight Dispatcher Operations 3 Credits

Prepares students for the practical application of previously acquired knowledge necessary to perform flight dispatcher functions. Focuses on the effects of weight and balance, performance, and flight characteristics in normal and abnormal flight.

Prerequisites: ATP A251.

ATP A405 Additional CFI Rating 2 Credits

Provides flight instruction for Professional Piloting students seeking additional ratings on their Flight Instructor Certificate, e.g., Instrument and/or Multi-engine.

Special Note: Open-entry/open-exit.

Registration Restrictions: Certified Flight Instructor Certificate required. Department approval required.

ATP A433 Aerospace Physiology 3 Credits

Surveys and explores the physiological information significant to pilots and others in the aviation community. Discusses the importance of physiological factors involved in flight.

Prerequisites: ATA A331 with a minimum grade of C.

Aviation Technology (AT)

Courses

AT A053 Preventive Maintenance for Pilots and Owners 1-4 Credits

For pilots/owners to gain knowledge and experience in items of aircraft and engine maintenance that they may legally perform. Beneficial to people who intend to buy airplanes.

AT A281 Aviation Maintenance: Airframe and Powerplant Mechanic 3 Credits

Provides advanced work in aviation maintenance records; expands on principles of airframe materials, systems and procedures; and explores powerplant operations and troubleshooting.

Registration Restrictions: Approved FAA Airman Certificate and/or Rating Application FAA Form 8610-2.

Biology (BIOL)

Courses

BIOL A074 Field Natural History 1-3 Credits

A short course on field natural history. Classes may focus on fungi, invertebrates, fish, mammals, birds, mosses and lichens, tracking, ecosystems and/or climate.

Special Note: May be repeated for credit. May include extensive hiking and camping. Community service course.

BIOL A075 Local Flora 1 Credit

The study of local plants with emphasis on identification and use.

Special Note: May be repeated for credit. May include preparation of pressed plant specimens and field trips. Community service course.

BIOL A100 Human Biology 3 Credits

Survey of biological principles as applied to human anatomy, physiology and genetics.

Special Note: Primarily for non-science majors. Not accepted for GER or biology major baccalaureate credit.

BIOL A102 Introductory Biology 3 Credits

Selected introductory biological concepts including the chemical basis of life, cell structure, energetics, physiology, genetics, biotechnology, evolution, ecology and scientific methodology. This course will provide the non-biologist with a working knowledge of life science that will be useful in making informed decisions on health and the environment.

Special Note: Primarily for non-science majors. Satisfies CAS B.S. degree requirements.

Attributes: UAA Natural Sciences GER.

BIOL A103 Introductory Biology Laboratory 1 Credit

Presents introductory biological concepts including characteristics of life, evolution, genetics, energetics, ecology, biotechnology and the scientific method. Provides the non-biologist with knowledge of biology enabling them to make informed decisions in areas such as health and the environment.

Special Note: Primarily for non-science majors.

Prerequisites: BIOL A102 or concurrent enrollment.

Attributes: UAA Natural Sci Lab Only GER.

BIOL A108 Principles and Methods in Biology 6 Credits

Introduces the biological sciences through an exploration of core themes and fundamental skills. Exposes students to biological theory and laboratory practice through integrated lecture and experiential learning modules.

Prerequisites: CHEM A105 with a minimum grade of C or concurrent enrollment.

Corequisites: BIOL A108L.

Attributes: UAA Natural Science w/ Lab GER.

BIOL A111 Human Anatomy and Physiology I 4 Credits

Integrated view of human structure and function. Provides a foundation in relevant chemistry, cell biology, histology and unifying concepts.

Covers integumentary, skeletal, muscular and nervous systems.

Special Note: Does not apply for biology major credit. One three-hour lab per week.

May Be Stacked With: BIOL A113

Corequisites: BIOL A111L.

Attributes: UAA Natural Science w/ Lab GER.

BIOL A112 Human Anatomy and Physiology II 4 Credits

Integrated view of human structure and function. Continuation of Human Anatomy and Physiology I. Covers endocrine, cardiovascular, lymphatic, immune, respiratory, digestive, urinary and reproductive systems.

Special Note: Does not apply for biology major credit. One three-hour lab per week.

May Be Stacked With: BIOL A114

Prerequisites: BIOL A111 with a minimum grade of C.

Corequisites: BIOL A112L.

Attributes: UAA Natural Science w/ Lab GER.

BIOL A113 Lectures in Human Anatomy and Physiology I 3 Credits

Integrated view of human structure and function. Provides a foundation in relevant chemistry, cell biology, histology and unifying concepts.

Covers integumentary, skeletal, muscular and nervous systems. Lecture only, no laboratory.

Registration Restrictions: Current Alaska registered nurse license and permission of both the Associate Dean of Nursing and the course instructor.

May Be Stacked With: BIOL A111

BIOL A114 Lectures in Human Anatomy and Physiology II 3 Credits

Integrated view of human structure and function. Continuation of Lectures in Human Anatomy and Physiology I. Covers endocrine, cardiovascular, lymphatic, immune, respiratory, digestive, urinary and reproductive systems. Lecture only, no laboratory.

Registration Restrictions: Current Alaska registered nurse license and permission of both the Associate Dean of Nursing and the course instructor.

May Be Stacked With: BIOL A112

Prerequisites: BIOL A111 with a minimum grade of C or BIOL A113 with a minimum grade of C.

BIOL A124 Biota of Alaska: Selected Topics 1-4 Credits

Explores characteristics of animals, plants, fungi and protists of Alaska. Can include life history, habitat, ecology and behavior.

Special Note: May include extensive hiking and camping. Can be repeated once with a change of subtitle for a maximum of 4 credits.

BIOL A141 Introduction to Medicine and the Health Professions **4 Credits**

Provides students with skills to succeed at college and to proceed into medicine, nursing or another health profession. Includes modules in oral communication, written communication, medical terminology, how to succeed in college, biomedical ethics, microbiology, genetics, anatomy and physiology. Supplemented with guest lectures by medical faculty, nursing faculty and other health professionals, tours of medical and teaching facilities, and job-shadowing of doctors, nurses and other health professionals.

Registration Restrictions: Admission to the Alaska WWAMI biomedical program's Della Keats/UDoC program.

BIOL A178 Fundamentals of Oceanography **3 Credits**

Principles of oceanography, with emphasis on the ocean's biological, physical, chemical, and geological processes, and how ocean processes affect the atmosphere.

Registration Restrictions: Placement into MATH A105 or higher.

Crosslisted With: GEOL A178

Attributes: UAA Natural Sciences GER.

BIOL A179 Fundamentals of Oceanography Laboratory **1 Credit**

Laboratory exercises designed to illustrate principles and concepts developed in BIOL A178/GEOL A178.

Registration Restrictions: Placement into MATH A105 or higher.

Crosslisted With: GEOL A179

Attributes: UAA Natural Sci Lab Only GER.

BIOL A198 Individual Research **1-6 Credits**

Lab and field investigations on specific subjects in biology. Topic for study to be approved and directed by a faculty member in biological sciences.

Special Note: May be repeated once for a maximum of 6 credits.

Registration Restrictions: Faculty permission required.

BIOL A200 Introduction to Complexity **3 Credits**

An introduction to the science of complexity, currently used to predict system behavior in the physical, life, and social sciences.

Crosslisted With: CPLX A200.

Prerequisites: MATH A121 or MATH A151.

Attributes: UAA Natural Sciences GER.

BIOL A240 Introductory Microbiology for Health Sciences **4 Credits**

General introductory microbiology covering bacterial metabolism and genetics, virology, host parasite interactions, host defense mechanisms and epidemiology.

Special Note: Recommended for associate and baccalaureate health science programs. Laboratory exercises generally require students to return to the lab to record experimental results after 24 hours throughout the semester. Not accepted for Biology degree credit. Students must attend lab the first week of class or they may be administratively dropped.

Registration Restrictions: Concurrent enrollment in BIOL A112 or 8 hours in biology or chemistry.

May Be Stacked With: BIOL A241

Corequisites: BIOL A240L.

BIOL A241 Lectures in Introductory Microbiology for Health Sciences **3 Credits**

Lectures in introductory microbiology covering metabolism and genetics, virology, host parasite interactions, host defense mechanisms and epidemiology.

Special Note: BIOL A241 is the lecture part of BIOL A240 only; it does not have a lab session. Recommended for students who have previously received credit for a microbiology course and who need to update their understanding of health science-related microbiology and for associate and baccalaureate health science programs. Not open to students who have completed BIOL A240 or BIOL/MBIO A340 during the previous five years. Not accepted for Biology degree credit.

Registration Restrictions: 8 hours in biology or chemistry or concurrent enrollment in BIOL A112.

May Be Stacked With: BIOL A240

BIOL A242 Fundamentals of Cell Biology **3 Credits**

Fundamental concepts and processes important to the structure and function of the smallest unit of life.

Prerequisites: BIOL A108 with a minimum grade of C and CHEM A105 with a minimum grade of C and CHEM A105L with a minimum grade of C.

BIOL A243 Experiential Learning: Cell Biology and Genetics **4 Credits**

Experiential learning course that includes discussion of theories and concepts, and extensive laboratory exercises in cell and organismal culture, genetic analysis, nucleic acid and enzyme analysis, hypothesis testing and application of the scientific method. Introduces microscopy and spectroscopy, data analysis, statistical analysis, writing for scientific publication and oral presentation of scientific research.

Prerequisites: BIOL A242 with a minimum grade of C or concurrent enrollment and BIOL A252 with a minimum grade of C or concurrent enrollment.

BIOL A252 Principles of Genetics **3 Credits**

Basic principles of genes, heredity, and variation in living organisms at cellular, molecular and population levels.

Prerequisites: BIOL A108 with a minimum grade of C and CHEM A105 with a minimum grade of C and CHEM A105L with a minimum grade of C.

BIOL A271 Principles of Ecology **3 Credits**

Introduces the basic principles of ecology including the physical and biological nature of environment in relation to living systems; the physiological, morphological and behavioral adaptations of organisms; the dynamics and structures of populations, biological communities, ecosystems, and biomes; and the interdependence of natural and human systems.

Prerequisites: BIOL A211 with a minimum grade of C or (BIOL A108 with a minimum grade of C and CHEM A105 with a minimum grade of C and CHEM A106 with a minimum grade of C or concurrent enrollment).

BIOL A273 Experiential Learning: Ecology and Evolution **4 Credits**
Hands-on application of the principles of ecology and evolution in laboratory and field contexts including hypothesis testing, the use of the scientific method in practical laboratory and field applications, writing for scientific publication, and presentation of scientific information.

Prerequisites: BIOL A271 with a minimum grade of C or concurrent enrollment and BIOL A288 with a minimum grade of C or concurrent enrollment.

BIOL A288 Principles of Evolution **3 Credits**

Introduces the basic principles and mechanisms of the evolution of living systems emphasizing the evidence supporting modern understanding of the patterns and processes associated with individual and population variability, transmission of genetic information, lineage diversification, and biological change.

Prerequisites: BIOL A108 with a minimum grade of C.

BIOL A310 Principles of Animal Physiology **3 Credits**

Fundamental principles of cellular and system physiology of animals with emphasis on vertebrate and, in particular, human physiology.

Prerequisites: BIOL A242 with a minimum grade of C.

BIOL A311 Experiential Learning: Animal Physiology **2 Credits**

Focuses on the cellular and system physiology of animals. Emphasizes laboratory investigations of vertebrate physiology.

Prerequisites: BIOL A310 with a minimum grade of C or concurrent enrollment.

BIOL A316 Principles of Plant Physiology **3 Credits**

Physiology of vascular plants: growth, development, photosynthesis, transpiration, uptake of water and nutrients, transportation of materials, and metabolism.

Prerequisites: BIOL A242 with a minimum grade of C.

BIOL A317 Experiential Learning: Plant Physiology **2 Credits**

Focuses on cellular and system physiology of plants. Emphasizes laboratory investigations of vascular plants, in particular flowering plants.

Prerequisites: BIOL A316 with a minimum grade of C or concurrent enrollment.

BIOL A320 Vertebrate Biology **3 Credits**

A survey of vertebrates of the world, with emphasis on their evolution, diversity and biogeography, and on comparative morphology, physiology, ecology, and behavior.

Prerequisites: BIOL A288 with a minimum grade of C.

BIOL A321 Experiential Learning: Vertebrate Biology **2 Credits**

Theory and practice in vertebrate biology including laboratory activities focusing on evolution, diversity and biogeography, comparative morphology, physiology, ecology, and behavior.

Prerequisites: BIOL A320 with a minimum grade of C or concurrent enrollment or BIOL A487 with a minimum grade of C or concurrent enrollment.

BIOL A330 Plant Biology **3 Credits**

Exploration of plant anatomy, morphology, basic physiology, ecology, evolution and relationship of humans to plants.

Prerequisites: BIOL A288 with a minimum grade of C.

BIOL A332 Experiential Learning: Plant Biology **2 Credits**

Laboratory and field applications in plant biology emphasizing relevant ecological questions and techniques, and the floristic diversity of Alaska.

Prerequisites: BIOL A271 with a minimum grade of C and BIOL A330 or concurrent enrollment.

BIOL A365 Astrobiology **3 Credits**

A comprehensive examination of the possibility of the existence of life (microbial and advanced) outside of the Earth, the probability of discovery of extraterrestrial life (methods of planet detection, chemical signatures of microbial life, and contact with advanced life), and the scientific and cultural implications of such a discovery. Includes the study of star and planet formation rates, habitability zones, origin of life, evolution, and formation of intelligence.

Registration Restrictions: Junior standing and completion of all GER Tier 1 (basic college-level skills) courses.

Crosslisted With: ASTR A365

Prerequisites: BIOL A108 and (PHYS A123 or PHYS A211).

Attributes: UAA Integrative Capstone GER.

BIOL A406 Experiential Learning: Biostatistics **4 Credits**

Covers design of biological experiments and explores and applies statistics to biological problems.

Prerequisites: BIOL A271 with a minimum grade of C and STAT A253 with a minimum grade of C.

BIOL A408 Experiential Learning: Scanning Electron Microscopy (SEM) **6 Credits**

Combines theory and practice of scanning electron microscopy (SEM) with laboratory training in the practical operation of the SEM and ancillary equipment.

Registration Restrictions: Departmental approval

Prerequisites: BIOL A242 with a minimum grade of C and BIOL A252 with a minimum grade of C.

BIOL A412 Behavioral Endocrinology **3 Credits**

Introduces the concepts of chemical messengers and the principles of hormonal integration of physiology and behavior associated with reproduction, stress, biological rhythms, and learning and memory.

Prerequisites: BIOL A310 with a minimum grade of C.

BIOL A413 Neurophysiology **3 Credits**

Explores the relationship between molecules, cells, systems and behavior. Focuses on membrane and electrical properties of neurons, synaptic physiology, human neuropathologies, and sensory and motor system function. Provides opportunities for community outreach in comparative neuroanatomy and neuroscience.

Prerequisites: BIOL A310 with a minimum grade of C.

BIOL A414 Chronobiology **3 Credits**

Examines the presence and physiological basis of biological rhythms and how changes in the different lighting of the seasons, sleep/wake patterns and non-photoc cues can impact the biological clock.

Prerequisites: (BIOL A111 with a minimum grade of C and BIOL A112 with a minimum grade of C) or BIOL A310 with a minimum grade of C.

BIOL A415 Comparative Animal Physiology 3 Credits

An examination of the physiological adaptations of marine, freshwater and terrestrial organisms. The comparative approach will be used in order to better understand how animals are uniquely adapted to their physical environment.

Special Note: Students who complete BIOL A415 as part of their undergraduate degree cannot receive credit toward their graduate degree from BIOL A615.

May Be Stacked With: BIOL A615

Prerequisites: BIOL A310.

BIOL A417 Applied Kinesiology and Exercise Physiology 3 Credits

Examines the effects of acute and chronic exercise on physiological and biochemical processes in the body and the role of exercise in health and disease, soreness, and fatigue.

Prerequisites: BIOL A310 with a minimum grade of C or (BIOL A111 with a minimum grade of C and BIOL A112 with a minimum grade of C).

BIOL A418 Fish Physiology 3 Credits

Overviews fish physiology with emphasis on understanding the ways in which fish are uniquely adapted to their physical environment.

Prerequisites: BIOL A310 with a minimum grade of C.

BIOL A423 Ichthyology 3 Credits

Overviews the evolution, taxonomy, anatomy, physiology and ecology of fish emphasizing Alaska's taxa.

Prerequisites: BIOL A252 with a minimum grade of C and BIOL A320 with a minimum grade of C.

BIOL A427 Marine Invertebrate Biology 3 Credits

A study of functional morphology, life history, systematics, evolution and other selected aspects of the biology of marine invertebrates.

Prerequisites: BIOL A242 with a minimum grade of C and BIOL A252 with a minimum grade of C.

BIOL A430 Marine Mammal Biology 4 Credits

An introduction to the biology and ecology of marine mammals, with an emphasis on understanding how marine mammals are adapted to their habitat, and the roles that they play in the marine ecosystem.

Prerequisites: BIOL A271.

BIOL A431 Plant Diversity and Evolution 3 Credits

Focuses on understanding, organizing and describing plant diversity in relation to evolutionary principles; integrating data to address hypotheses; and identifying and classifying Alaskan flora.

Prerequisites: BIOL A271 with a minimum grade of C or BIOL A288 with a minimum grade of C.

BIOL A441 Animal Behavior 3 Credits

Explores the ecological, evolutionary, physiological and genetic bases of animal behavior.

Prerequisites: BIOL A288 with a minimum grade of C.

BIOL A442 Experiential Learning: Animal Behavior 3 Credits

Theory and practice in research methods and analysis in animal behavior. Students conduct research in areas such as foraging behavior, communication, predator avoidance, sensory systems and social behaviors.

Prerequisites: BIOL A273 with a minimum grade of C.

Corequisites: BIOL A441.

BIOL A452 Human Genome 3 Credits

An in-depth exploration of the human genome with emphasis on social aspects. Topics will include the Human Genome Project, genome database searching, human chromosome and gene structure, developmental genetics, genetics of normal human traits, hereditary diseases, genetic screening and ethical issues, and genomic evidence of human evolution and migrations.

Special Note: Normally offered in alternate fall semesters.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing.

Prerequisites: ANTH A205 or BIOL A252 or PSY A370.

Attributes: UAA Integrative Capstone GER.

BIOL A453 Experiential Learning: Microbial Ecology 4 Credits

Theory and application of laboratory techniques in microbial ecology, diversity and evolution. Emphasizes experimental design, scientific writing and oral presentation skills.

Prerequisites: BIOL A342 with a minimum grade of C and BIOL A450 with a minimum grade of C or concurrent enrollment.

BIOL A454 Experiential Learning: Microbial Biotechnology 4 Credits

Theory and application of laboratory techniques in microbial biotechnology, genetic engineering of microorganisms and applied microbiology. Emphasizes experimental design, data collection and analysis, scientific writing, and oral presentation skills.

Prerequisites: BIOL A342 with a minimum grade of C and BIOL A451 with a minimum grade of C or concurrent enrollment.

BIOL A455 Experiential Learning: Bioinformatics 4 Credits

Explores advanced computational theory and methods for analyses of biological phenomena. Utilizes algorithms and databases used in sequence alignment, sequence searching, metagenomics, phylogenetics, analysis of next-generation sequencing data, protein structures, and molecular pathways. Evaluates genomic approaches for understanding complex biological systems in model organisms and human disease.

Special Note: Not available for credit to students who have completed BIOL A655.

May Be Stacked With: BIOL A655

Prerequisites: BIOL A252 with a minimum grade of C and (MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C) and (STAT A253 with a minimum grade of C or STAT A307 with a minimum grade of C).

BIOL A456 Nonlinear Dynamics and Chaos 3 Credits

An introduction to nonlinear dynamics and chaos. Concrete examples from physics, biology, chemistry, and engineering are used to develop analytical methods and geometric intuition. Topics covered include phase plane analysis, iterated maps, fractals, and strange attractors.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing.

Crosslisted With: CHEM A456 and PHYS A456

Prerequisites: MATH A253 with a minimum grade of C and (PHYS A124 with a minimum grade of C or PHYS A212 with a minimum grade of C).

Attributes: UAA Integrative Capstone GER.

BIOL A461 Molecular Biology 3 Credits

Study of molecular biology, with emphasis on molecular genetics and the molecular biology of eukaryotic cells and cancer cells, including current developments in the field.

May Be Stacked With: BIOL A661

Prerequisites: BIOL A252.

BIOL A463 Molecular Biology of Cancer 3 Credits

Studies the molecular biology of cancer. Emphasizes the mechanisms by which a normal cell becomes a malignant cell including the role of chemicals, viruses and other environmental insults in carcinogenesis. Studies the fundamentals of cancer molecular biology and the current literature through a combination of team-based learning (TBL), research, discussions, term papers, and seminars.

Prerequisites: BIOL A252 with a minimum grade of C.

BIOL A464 Metals in Biology 3 Credits

Investigates the fundamental roles of metals in biological systems. Includes transition metals, catalysis of reactions, cellular and organismal homeostasis, evolutionary and ecological relevance, deficiency and toxicity. Incorporates basic concepts of bioinorganic chemistry and structural biology.

Registration Restrictions: Junior or Senior standing

Prerequisites: CHEM A106 with a minimum grade of C and BIOL A242 with a minimum grade of C.

BIOL A465 Experiential Learning: Molecular Biology 4 Credits

A practical implementation of the theory learned in BIOL A461 which includes in vitro DNA techniques, gene expression analysis and genomics. Students will also learn experimental design, proposal writing, and oral and written presentation skills.

Special Note: Not available for credit to students who have completed BIOL A665.

May Be Stacked With: BIOL A665

Prerequisites: BIOL A461 with a minimum grade of C or concurrent enrollment.

BIOL A466 Fish Ecology 3 Credits

A broad survey of fish habitats and the ecological processes that govern the performance of individuals, abundance and productivity of populations, and structure of communities. Emphasizes Alaska's salmon populations.

Prerequisites: BIOL A271 with a minimum grade of C and BIOL A320 with a minimum grade of C.

BIOL A467 Wildlife Population Dynamics and Management 3 Credits

Discusses history and ecological principles underlying fish and wildlife management. Includes key theories of population ecology, methods for estimating population size, survival and recruitment. Discusses application of theory to contemporary population management in the face of uncertainty and habitat change.

Prerequisites: BIOL A271 with a minimum grade of C.

BIOL A471 Immunology 3 Credits

Fundamental concepts of immunology including cells and tissues of the immune system, innate immunity, lymphocyte development, antigenicity, cytokine signaling, antibody responses, immunotherapies and vaccines. Discusses comparative immunological evolution of non-human species. Emphasizes immunological aspects of human disease including host-pathogen interactions, autoimmune diseases, immunodeficiencies and cancer.

Crosslisted With: CHEM A471.

Prerequisites: BIOL A242 with a minimum grade of C and BIOL A252 with a minimum grade of C.

BIOL A472 Biogeography 3 Credits

Ecological basis and historical patterns of the distribution of organisms and ecosystems on a worldwide basis. Examines current theories regarding the origin of these distributions.

Prerequisites: BIOL A288 with a minimum grade of C.

BIOL A473 Conservation Biology 3 Credits

Examines the human drivers of global environmental change (human population growth and consumption of resources) and the consequences of environmental degradation. Discusses the use of standard protocols and modern instruments to assess environmental change.

Special Note: Service-learning course. Includes fieldwork outside of class time.

Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses

Prerequisites: BIOL A271 with a minimum grade of C or ENVI A211 with a minimum grade of C.

Attributes: UAA Integrative Capstone GER.

BIOL A474 Ecotoxicology 3 Credits

Examines the chemical and ecological nature of pollution processes and the major classes and environmental fate of pollutants.

Prerequisites: BIOL A271 with a minimum grade of C.

BIOL A477 Tundra and Taiga Ecosystems 3 Credits

Analysis of tundra and taiga ecosystems with emphasis on system functions and dynamics. Comparisons with other terrestrial systems will be made and unique characteristics will be emphasized.

May Be Stacked With: BIOL A677

Prerequisites: BIOL A271.

BIOL A478 Biological Oceanography 3 Credits

Discusses principles of biological oceanography. Emphasizes biological, chemical and physical processes in the world's oceans. Discusses linkages between biological ocean processes and carbon transport

Special Note: Not available for credit to students who have completed BIOL A678.

Registration Restrictions: Junior or senior standing

May Be Stacked With: BIOL A678

BIOL A479 Physiological Plant Ecology 3 Credits

Analysis of interactions between plants and their environment. Deals with acquisition of resources, both energy and matter. Radiation interception and energy dissipation will be analyzed using energy balance equations. The nature of low and high temperature stress and adaptations to deal with these will be described.

May Be Stacked With: BIOL A679

Prerequisites: BIOL A271 and BIOL A316.

BIOL A480 Ecological and Conservation Genetics 3 Credits

Examines the primary focus and processes involved in shaping genetic variation in natural populations such as mutation, drift, selection, migration, recombination, mating patterns, population size and population subdivision. Discusses methods of measuring genetic variation in nature and experimental tests of important ideas in population genetics and microevolution theory.

Prerequisites: BIOL A252 with a minimum grade of C and BIOL A288 with a minimum grade of C.

BIOL A481 Marine Biology 3 Credits

Examines marine biology with a focus on understanding the pathways and transformation of energy and matter in coastal, pelagic and benthic waters, particularly those in Alaska. Studies the influence of the physical environment, climate change and human activities on marine species diversity, food webs, and tropho-dynamics.

Registration Restrictions: Junior or senior standing and completion of all GER Tier 1 (basic college-level skills) courses

Prerequisites: BIOL A271 with a minimum grade of C or ENVI A211 with a minimum grade of C.

Attributes: UAA Integrative Capstone GER.

BIOL A482 Spatial Ecology 3 Credits

Analyzes the physical and ecological nature of landscapes. Uses GIS tools to map and understand patterns in physical and biological properties such as migration of ungulates and birds; local, regional, continental and global patterns of precipitation chemistry; associations of societal practices; and spatial patterns in the water and carbon cycles.

Prerequisites: BIOL A271 with a minimum grade of C.

BIOL A483 Exploration Ecology 2 Credits

Explores principles and techniques used for study and collection of baseline ecological data in remote landscapes. Discusses survey and analytical resources and ecological project design.

Registration Restrictions: Instructor approval

Prerequisites: BIOL A271 with a minimum grade of C.

Corequisites: BIOL A484.

BIOL A484 Experiential Learning: Exploration Ecology Field Study 4 Credits

Explores principles and techniques used for study and collection of baseline ecological data in remote landscapes. Applies field survey and analytical resources to ecological project design and implementation.

Registration Restrictions: Instructor approval

Corequisites: BIOL A483.

BIOL A486 Evolutionary Ecology 3 Credits

Explores conceptual issues in the evolution of life histories and species interactions. Includes foundational and contemporary research in topics such as quantitative genetics, natural selection and the evolution of sex.

Prerequisites: BIOL A271 with a minimum grade of C and BIOL A288 with a minimum grade of C.

BIOL A487 Comparative Anatomy of Vertebrates 3 Credits

Investigates the links between the forms and functions of shared organ systems. Discusses the evolutionary, ecological and physiological implications of shared organ systems.

Prerequisites: BIOL A288 with a minimum grade of C.

BIOL A489 Population Genetics and Evolutionary Processes 3 Credits

Examines the primary forces and processes involved in shaping genetic variation in natural populations. Evaluates and applies methods of measuring genetic variation in nature.

Registration Restrictions: Senior standing and completion of all GER Tier 1 (basic college-level skills) courses

Prerequisites: BIOL A252 with a minimum grade of C or BIOL A288 with a minimum grade of C.

Attributes: UAA Integrative Capstone GER.

BIOL A490 Selected Lecture Topics in Biology 1-3 Credits

Detailed coverage of a selected lecture topic in biology.

Special Note: May be repeated for a maximum of 12 credits with a change in subtitle. Prerequisites and corequisites may vary with topic.

Registration Restrictions: 16 credits in biology.

May Be Stacked With: BIOL A690

BIOL A490L Selected Laboratory Topics in Biology 1-3 Credits

Detailed coverage of a selected laboratory topic in biology.

Special Note: May be repeated for a maximum of 12 credits with change in subtitle. Prerequisites and corequisites may vary with topic.

Registration Restrictions: 16 credits in biology.

May Be Stacked With: BIOL A690L

BIOL A492 Undergraduate Seminar 1 Credit

The exploration of current and emerging ideas and findings across the biological sciences, with an emphasis on critique of the primary literature. The course will use readings from the primary literature to illustrate scientific methods, experimental design, and applied statistics in biology. The course will also build and refine student's scientific writing skills, and sharpen analytical thinking and scientific creativity.

Special Note: May be repeated once for credit.

Registration Restrictions: Junior or senior standing.

BIOL A495 Instructional Practicum: Laboratory 1 Credit

Supervised practical experience in a two-hour, three-hour or four-hour biology laboratory or experiential learning course. Planning, presentation of material, achievement testing and correlation with lecture under the direct supervision of department faculty.

Special Note: May be repeated once for credit.

Registration Restrictions: Minimum of 20 credits in biology.

BIOL A495A Internship in the Biological Sciences 3 Credits

Professional work experience in appropriate areas of the biological sciences. Open to qualified students receiving faculty recommendation, and as placements are available.

Special Note: May be repeated three times for credit, but only 3 credits may be applied to elective upper-division credit requirements for the baccalaureate degree in any of the BA or BS degrees offered by the Department of Biological Sciences.

Registration Restrictions: Junior standing with a minimum of 12 credits in biology courses and faculty permission.

BIOL A498 Individual Research 1-6 Credits

Lab and field investigations on specific subjects in biology. Topic for study to be approved and directed by a faculty member in biological sciences.

Special Note: May be repeated for a maximum of 6 credits.

Registration Restrictions: Faculty permission required.

Prerequisites: BIOL A252.

BIOL A499 Senior Thesis 3 Credits

Guides students through the thesis writing process for undergraduate research that meets professional publication standards. Presents thesis in an oral or poster presentation in a science forum.

Special Note: Required for departmental honors in Biology.

Registration Restrictions: Faculty permission required; senior status in Biology or related discipline.

BIOL A601 Experimental Design and Statistics 3 Credits

Study of the concepts of experimental design and statistics of particular relevance to ecological, environmental, evolutionary and physiological research in biology. Students directly apply the course content to the design and development of their own graduate research proposal as part of the course.

Special Note: Graduate students within the subdisciplines of ecology, physiology and evolutionary ecology are required to take this course during their first year of graduate study.

Registration Restrictions: Graduate standing and permission of instructor.

BIOL A604 Experimental Design for Cell/Molecular Biologists 3 Credits

Exploration of the concepts of experimental design and their application in the development and assessment of cell/molecular biological research. Students directly apply the course content to the development of their own graduate research proposals as part of the course.

Registration Restrictions: Graduate standing and permission of instructor

BIOL A605 Graduate Proseminar in Sciences 3 Credits

The proseminar is a required course designed for graduate students in biology and other sciences and focuses on the range of current research methods and the writing, teaching, critical and analytical skills necessary for successful graduate study.

Registration Restrictions: Graduate standing, permission of instructor

BIOL A606 Advanced Analysis and Interpretation 3 Credits

The course will cover advanced analytical techniques applying frequentist and Bayesian approaches. Topics will include applications of meta-analysis, data reduction, data mining, and parametric, non-parametric and descriptive statistics.

Registration Restrictions: Graduate standing, permission of instructor

BIOL A610 Microscopic Anatomy 3 Credits

Lectures and laboratories in microscopic anatomy are designed to provide the principles and concepts of histology, to define the morphological characteristics of the cells, tissues and organs of the human body and to relate this information to functional processes studied in concurrent and subsequent courses.

Registration Restrictions: Admission to graduate program in Biology, and approval of WWAMI Biomedical Program Director and faculty.

Crosslisted With: BIOM A610

BIOL A611 Gross Anatomy I and Embryology 5 Credits

Provides a broad understanding of the structural organization of the human body, as well as a basis in medical terminology. Goal is to provide foundation for physical examination and function assessment of the human organism. Course deals with organization of the human body at the macroscopic level. Integrates embryological development with study of the human cadaver and with examination of the normal living body. Course concentrates on study of the human torso and its cavities and the viscera they contain.

Registration Restrictions: Admission to graduate program in Biology and approval of WWAMI program director and faculty.

Crosslisted With: BIOM A611

BIOL A612 Mechanisms in Cell Physiology 4 Credits

Fundamental cellular events underlying the following topics: physiology of the cell membrane including ionic and electrical potential gradients, active transport, excitability and action potentials; biophysics of sensory receptors; neuromuscular transmission; muscle energetics and contractility; spinal reflexes and central synaptic transmission; autonomic nervous system; energy metabolism and temperature regulation; epithelial transport; gastrointestinal motility and secretions.

Registration Restrictions: Admission to a graduate program in Biology, and approval of WWAMI Biomedical Program Director and faculty.

Crosslisted With: BIOM A612

BIOL A615 Advanced Comparative Animal Physiology 4 Credits

An in-depth examination of the physiological adaptations of marine, freshwater, and terrestrial organisms. The comparative approach will be used in order to better understand how animals are uniquely adapted to their physical environment. In addition to meeting all requirements for BIOL A415, graduate students will be required to lead class discussions, research the literature and prepare a research proposal that addresses a current topic in comparative physiology, and to orally present and defend that research proposal to the class as a whole.

Special Note: Students who completed BIOL A415 as part of their undergraduate degree cannot receive credit toward their graduate degree from BIOL A615.

Registration Restrictions: Graduate standing

May Be Stacked With: BIOL A415

BIOL A621 Microbiology and Infectious Disease I 5 Credits

Pathogenesis and immunity of infectious disease and natural barriers. Microbiology, epidemiology, clinical manifestations, and control of representative bacterial, fungal, parasitic, and viral infectious diseases. Chemotherapeutics and principles of chemotherapy. Sterilization and principles of asepsis, nosocomial and iatrogenic infections and their presentation.

Registration Restrictions: Admission to graduate program in Biology and approval of WWAMI Biomedical Program Director and faculty.

Crosslisted With: BIOM A621

BIOL A623 Introduction to Immunology 2 Credits

Introduces basic immunological concepts and the role of these basic concepts in conditions such as immunodeficiencies, hypersensitivities, autoimmunity, blood transfusion, and transplantation.

Registration Restrictions: Admission to graduate program in Biology, and approval of WWAMI Biomedical Program Director and faculty.

Crosslisted With: BIOM A623

BIOL A631 Gross Anatomy II (Head, Neck, Ear, Nose, and Throat) 4 Credits

Gross anatomy of the skull, larynx, and pharynx. Also covers: audition and balance; physiology; clinical evaluation; maxillofacial disorders; diseases of nasal passages; naso- and oropharynx; accessory sinuses; and physical examination.

Registration Restrictions: Admission to graduate program in Biology, and approval of WWAMI Biomedical Program Director and faculty.

Crosslisted With: BIOM A631

BIOL A632 Nervous System 5 Credits

Integrated approach to the normal structure and function of the nervous system, including the eye. Neuropathological examples are presented as well as clinical manifestations of neurological disease.

Registration Restrictions: Admission to graduate program in Biology, and approval of WWAMI Biomedical Program Director and faculty.

Crosslisted With: BIOM A632

BIOL A634 Microbiology and Infectious Disease II 3 Credits

Continuation of BIOL A621/BIOM A621.

Registration Restrictions: Admission to graduate program in Biology, and approval of WWAMI Biomedical Program Director and faculty.

Crosslisted With: BIOM A634

BIOL A653 Gross Anatomy III: Musculoskeletal System 3 Credits

Gross, surface, applied and X-ray anatomy of musculoskeletal system including the spine, but excluding head and neck. Also covers histology of bone, cartilage, tendon-myotendinal junction and joints; musculoskeletal trauma and healing; pathology and clinical manifestations of other degenerative, inflammatory, metabolic, nutritional and congenital disorders; and physical examinations.

Registration Restrictions: Admission to graduate program in Biology, and approval of WWAMI Biomedical Program Director and faculty.

Crosslisted With: BIOM A653

BIOL A655 Experiential Learning: Advanced Bioinformatics 4 Credits

Explores advanced computational theory and methods for analysis of biological phenomena. Utilizes algorithms and databases used in sequence alignment, sequence searching, metagenomics, phylogenetics, analysis of next-generation sequencing data, protein structures, and molecular pathways. Evaluates genomic approaches for understanding complex biological systems in model organisms and human disease. Analyzes authentic datasets.

Special Note: Not available for credit to students who have completed BIOL A455.

Registration Restrictions: Graduate standing

May Be Stacked With: BIOL A455

BIOL A661 Advanced Molecular Biology 3 Credits

Advanced study of molecular biology, with emphasis on molecular genetics and the molecular biology of eukaryotic cells and cancer cells, including current developments in the field.

Special Note: In addition to meeting all requirements for BIOL A461, graduate students will be required to research the literature on a current topic in molecular biology, submit an extensive paper summarizing their findings including designs for future experiments on the subject, and give a seminar on the same topic. Not available for credit to students who have completed BIOL A461.

Registration Restrictions: Graduate standing

May Be Stacked With: BIOL A461

Prerequisites: BIOL A252.

BIOL A663 Advanced Molecular Biology of Cancer 3 Credits

A study of the molecular biology of cancer, with emphasis on the mechanisms by which a normal cell becomes a malignant cell, including the role of chemicals, viruses and other environmental insults in carcinogenesis.

Registration Restrictions: Graduate standing

Prerequisites: BIOL A461 with a minimum grade of C.

BIOL A665 Experiential Learning: Advanced Molecular Biology 4 Credits

A practical implementation of the theory learned in BIOL A661, which includes in vitro DNA techniques, gene expression analysis and genomics. Students will also learn experimental design, proposal writing, and oral and written presentation skills, along with mentorship and leadership skills.

Special Note: Not available for credit to students who have completed BIOL A465.

Registration Restrictions: Graduate standing

May Be Stacked With: BIOL A465

Prerequisites: BIOL A661 with a minimum grade of C.

BIOL A677 Advanced Tundra and Taiga Ecosystems 3 Credits

In-depth analysis of tundra and taiga ecosystems with emphasis on system functions and dynamics. Comparisons with other terrestrial systems will be made, and unique characteristics will be emphasized.

Special Note: In addition to meeting all requirements for BIOL A477, graduate students will be required to research the literature on a current topic in tundra and taiga ecosystems, submit an extensive paper summarizing their findings including designs for future experiments on the subject, and give a seminar on the same topic. Not available for credit to students who have completed BIOL A477.

Registration Restrictions: Graduate standing

May Be Stacked With: BIOL A477

Prerequisites: BIOL A271.

BIOL A678 Advanced Biological Oceanography 4 Credits

Principles of biological oceanography with an emphasis on biological, chemical and physical processes in the world's oceans and linkages between biological ocean processes and carbon transport. Current literature on ocean processes will be reviewed with an emphasis on emerging areas of study.

Special Note: Not available for credit to students who have completed BIOL A478.

Registration Restrictions: Graduate standing

May Be Stacked With: BIOL A478

BIOL A679 Advanced Physiological Plant Ecology 3 Credits

In-depth analyses of interactions between plants and their environment. Deals with acquisition of resources, both energy and matter. Radiation interception and energy dissipation will be analyzed using energy balance equations. The nature of low and high temperature stress and adaptations to deal with these will be described.

Special Note: In addition to meeting all requirements for BIOL A479, graduate students will be required to research the literature on a current topic in ecological plant physiology, submit an extensive paper summarizing their findings including designs for future experiments and give a seminar on the same subject. Not available for credit to students who have completed BIOL A479.

Registration Restrictions: Graduate standing

May Be Stacked With: BIOL A479

Prerequisites: BIOL A271 and BIOL A316.

BIOL A680 Ecological Genetics and Qualitative Microevolution 3 Credits

An advanced and in-depth examination of the primary forces and processes involved in shaping genetic variation in natural populations (mutation, drift, selection, migration, recombination, mating patterns, population size and population subdivision), methods of measuring genetic variation in nature, and experimental tests of important ideas in population genetics and microevolution theory.

Registration Restrictions: Graduate standing, permission of instructor

Prerequisites: BIOL A288 or BIOL A489.

BIOL A690 Advanced Lecture Topics in Biology 1-3 Credits

Advanced coverage of a selected lecture topic in biology.

Special Note: May be repeated for a maximum of 12 credits with change in subtitle. Prerequisites and corequisites may vary with topic. In addition to meeting all requirements for BIOL A490, graduate students will be required to research the literature and/or conduct a research project on an advanced topic in biology, submit an extensive paper summarizing their findings including designs for future experiments on the subject, and give a seminar on the same topic. Not available for credit to students who have completed BIOL A490 having the same subtitle.

Registration Restrictions: Graduate standing

May Be Stacked With: BIOL A490

BIOL A690L Advanced Laboratory Topics in Biology 1-3 Credits

Advanced coverage of a selected laboratory topic in biology.

Special Note: May be repeated for a maximum of 12 credits with change in subtitle. Prerequisites and corequisites may vary with topic. In addition to meeting all requirements for BIOL A490L, graduate students will be required to research the literature and/or conduct a research project on an advanced topic in biology, submit an extensive paper summarizing their findings including designs for future experiments on the subject, and give a seminar on the same topic. Not available for credit to students who have completed BIOL A490L having the same subtitle.

Registration Restrictions: Graduate standing

May Be Stacked With: BIOL A490L

BIOL A692 Graduate Seminar 1 Credit

Topical subjects in biology presented by graduate students, biology faculty, and guest speakers.

Special Note: May be repeated for a maximum of 2 credits.

Registration Restrictions: Graduate standing.

BIOL A696 Graduate Research Techniques 1 Credit

Training in data collection, analysis, presentation, and synthesis techniques, as appropriate to the field of biological research into which the graduate student has entered.

Special Note: May be repeated for a maximum of 6 credits.

Registration Restrictions: Graduate standing.

BIOL A698 Directed Research 1-6 Credits

Thesis specific research for the MS in Biological Sciences. Topic for study to be approved and directed by a faculty member in the biological sciences.

Special Note: May be repeated for a maximum of 12 credits in combination with BIOL A699; total for both courses not to exceed 12 credits toward MS degree.

Registration Restrictions: Graduate standing; permission of graduate advisor.

BIOL A699 Thesis 1-6 Credits

Planning, preparation and completion of thesis for the MS in Biological Sciences.

Special Note: May be repeated for a maximum of 12 credits in combination with BIOL A698; total for both courses not to exceed 12 credits toward MS degree.

Registration Restrictions: Graduate standing; permission of graduate advisor.

Biomedical Program-WWAMI (BIOM)

Courses

BIOM A418 Human Gross Anatomy 3 Credits

Provides a fundamental working knowledge of normal human gross anatomy and relates anatomy to clinical relevance. Includes dissection laboratory on cadavers.

Special Note: Instructor approval required for registration.

Registration Restrictions: Instructor approval

BIOM A490 Selected Lecture Topics in Biomedicine 1-3 Credits

Detailed coverage of a selected lecture topic in biomedicine.

Special Note: Not available for credit to students who have completed BIOM A690 with the same subtitle. May be repeated for a maximum of 9 credits with change of subtitle.

Registration Restrictions: Junior or senior standing and faculty permission

May Be Stacked With: BIOM A690

BIOM A610 Microscopic Anatomy 3 Credits

Lectures and laboratories in microscopic anatomy are designed to provide the principles and concepts of histology, to define the morphological characteristics of the cells, tissues and organs of the human body and to relate this information to functional processes studied in concurrent and subsequent courses.

Registration Restrictions: Admission to the WWAMI Biomedical Program.

Crosslisted With: BIOL A610

BIOM A611 Gross Anatomy I and Embryology 5 Credits

Provides a broad understanding of the structural organization of the human body, as well as a basis in medical terminology. Goal is to provide foundation for physical examination and function assessment of the human organism. Course deals with organization of the human body at the macroscopic level. Integrates embryological development with study of the human cadaver and with examination of the normal living body. Course concentrates on study of the human torso and its cavities and the viscera they contain.

Registration Restrictions: Admission to the WWAMI Biomedical Program.

Crosslisted With: BIOL A611

BIOM A612 Mechanisms in Cell Physiology 4 Credits

Fundamental cellular events underlying the following topics: physiology of the cell membrane including ionic and electrical potential gradients, active transport, excitability and action potentials; biophysics of sensory receptors; neuromuscular transmission; muscle energetics and contractility; spinal reflexes and central synaptic transmission; autonomic nervous system; energy metabolism and temperature regulation; epithelial transport; gastrointestinal motility and secretions.

Registration Restrictions: Admission to the WWAMI Biomedical Program.

Crosslisted With: BIOL A612

BIOM A613 Introduction to Clinical Medicine I 4 Credits

Designed to develop clinical medicine skills by teaching physical examination skills, addressing advanced professional and ethical issues, and enhancing clinical reasoning skills by using the medical history and the physical examination in the process of solving problems.

Registration Restrictions: Admission to WWAMI Biomedical Program.

BIOM A614 Biochemistry I 4 Credits

Covers molecular and cellular chemistry in humans, with emphasis on molecular genetics, proteins and carbohydrates.

Registration Restrictions: Admission to the WWAMI Biomedical Program.

BIOM A615 Medical Information for Decision Making (MIDM) 1 Credit

An introduction to methods for identifying and retrieving high quality, relevant evidence and for describing and applying rigorous criteria when reading primary studies that report on the effectiveness of therapeutic or preventative interventions. Basic research methodologies and statistics are incorporated to assist students in evaluating the literature.

Registration Restrictions: Admission to the WWAMI Biomedical Program.

BIOM A618 Clinical Anatomy 4.5 Credits

Provides an overview of clinical human gross anatomy and integrates knowledge of anatomy and health conditions. Emphasizes critical relationships and clinical significance. Facilitates an understanding of how anatomy aids in effective clinical interventions.

Registration Restrictions: Graduate standing and admission to Creighton Occupational Therapy degree program or instructor approval

BIOM A621 Microbiology and Infectious Disease I 5 Credits

Pathogenesis and immunity of infectious disease and natural barriers. Microbiology, epidemiology, clinical manifestations and control of representative bacterial, fungal, parasitic, and viral infectious diseases. Chemotherapeutics and principles of chemotherapy. Sterilization and principles of asepsis, nosocomial and iatrogenic infections and their presentation.

Registration Restrictions: Admission to the WWAMI Biomedical Program.

Crosslisted With: BIOL A621

BIOM A622 Introduction to Clinical Medicine II 4 Credits

Designed to advance clinical medicine skills by adding further physical examination skills, addressing advanced professional and ethical issues, and enhancing clinical reasoning skills by using the medical history and the physical examination in the process of solving problems.

Registration Restrictions: Admission to the WWAMI Biomedical Program.

BIOM A623 Introduction to Immunology 2 Credits

Introduces basic immunological concepts and the role of these basic concepts in conditions such as immunodeficiencies, hypersensitivities, autoimmunity, blood transfusion, and transplantation.

Registration Restrictions: Admission to the WWAMI Biomedical Program.

Crosslisted With: BIOL A623

BIOM A624 Biochemistry II 3 Credits

Continuation of BIOM A614 with emphasis on lipid and nitrogen metabolism.

Registration Restrictions: Admission to the WWAMI Biomedical Program.

BIOM A631 Gross Anatomy II (Head, Neck, Ear, Nose, and Throat) 4 Credits

Gross anatomy of the skull, larynx, and pharynx. Also covers: audition and balance; physiology; clinical evaluation; maxillofacial disorders; diseases of nasal passages; naso- and oropharynx; accessory sinuses; and physical examination.

Registration Restrictions: Admission to the WWAMI Biomedical Program.

Crosslisted With: BIOL A631

BIOM A632 Nervous System 5 Credits

Integrated approach to the normal structure and function of the nervous system, including the eye. Neuropathological examples are presented as well as clinical manifestations of neurological disease.

Registration Restrictions: Admission to the WWAMI Biomedical Program.

Crosslisted With: BIOL A632

BIOM A634 Microbiology and Infectious Disease II 3 Credits

Continuation of BIOL A621/BIOM A621.

Registration Restrictions: Admission to the WWAMI Biomedical Program.

Crosslisted With: BIOL A634

BIOM A650 Systems of Human Behavior I 3 Credits

Selected overview of contributions from behavioral sciences useful to physicians in primary care clinical practice. Emphasizes impact of such factors as cultural background, social role, sexual identity and belief system upon students' future effectiveness as physicians. Presents role of behavioral factors in major management problems faced in medical practice. Teaches useful skills for analyzing behavior, defining behavioral objectives, and designing treatment strategies to obtain these objectives.

Registration Restrictions: Admission to the WWAMI Biomedical Program.

Crosslisted With: PSY A650

BIOM A653 Gross Anatomy III: Musculoskeletal System 3 Credits

Gross, surface, applied and X-ray anatomy of musculoskeletal system including the spine, but excluding head and neck. Also covers histology of bone, cartilage, tendon-myotendinal junction and joints; musculoskeletal trauma and healing; pathology and clinical manifestations of other degenerative, inflammatory, metabolic, nutritional and congenital disorders; and physical examinations.

Registration Restrictions: Admission to the WWAMI Biomedical Program.

Crosslisted With: BIOL A653

BIOM A690 Advanced Selected Topics in Biomedicine 1-3 Credits

Advanced coverage of a selected topic within biomedicine. Students will analyze and evaluate research and clinical data to formulate diagnoses and future avenues of research within biomedicine.

Special Note: Students enrolled in BIOM A690 will be required to complete additional work and at a higher level than students enrolled in BIOM A490 with the same subtitle. Not available for credit to students who have completed BIOM A490 with the same subtitle. May be repeated for a maximum of 9 credits with change of subtitle.

Registration Restrictions: Graduate standing and faculty permission
May Be Stacked With: BIOM A490

BIOM A692 Graduate Seminar 1 Credit

Topical subjects relevant to biomedical or molecular medicine selected from professional seminar series offered in the UMED district.

Special Note: May be repeated for a maximum of 4 credits.

Registration Restrictions: Graduate standing and faculty permission.

BIOM A696 Graduate Research Techniques 1 Credit

Provides training in data collection, analysis, presentation and synthesis techniques, as appropriate to the field of biomedical or molecular medicine research.

Special Note: May be repeated for a maximum of 6 credits.

Registration Restrictions: Graduate standing and faculty permission

BIOM A698 Directed Research 1-6 Credits

Research in biomedical or molecular medicine for graduate students.

Area of research to be approved and directed by a faculty member in the WWAMI School of Medical Education.

Special Note: May be repeated for a maximum of 6 credits.

Registration Restrictions: Graduate standing and faculty permission.

BIOM A699 Thesis 1-9 Credits

Planning, preparation and completion of graduate thesis for which the student's graduate advisor is a faculty member in the WWAMI School of Medical Education.

Special Note: May be repeated for a maximum of 18 credits.

Registration Restrictions: Graduate standing and permission of graduate advisor.

Business Administration (BA)

Courses

BA A100 Tourism in Rural Alaska 3 Credits

This is the Alaska that visitors come to see: the land, water, animals and people of rural Alaska. Provides information about the Alaska visitor and the visitor industry. Local history, geography, geology, small business, land status, Native culture and ecotourism will be included. Also, starting and operating a small business, advertising and marketing, hiring and training employees, and customer service. A great overview of all aspects of the visitor industry for those working in industry, thinking about starting a business, or who already have a business.

BA A131 Personal Finance 3 Credits

Introduction to consumer finance. Surveys topics such as family budgeting, income tax fundamentals, consumer credit, home buying and financing, auto financing, insurance, investment fundamentals, estate planning, and retirement planning.

BA A151 Business Foundations 3 Credits

Introduces students to key business principles. Explores strategies allowing companies to compete in today's complex global marketplace. Discusses the primary functional areas of business, including management, marketing, finance, accounting and information systems. Provides students with opportunities to develop essential business skills such as critical thinking, problem solving, team building and business etiquette.

Attributes: UAA Social Sciences GER.

BA A155 Personal Investments 3 Credits

Introduces students to investment of personal income and how to define and reach their financial goals. Surveys topics such as stocks, bonds, mutual funds, banking, annuities, insurance, real estate, estate planning, and taxes.

BA A166 Entrepreneurship and Small Business Management 3 Credits

Introduces the concepts and practical aspects of entrepreneurial management for starting and operating a small business. Focuses on decision making, management, leadership, marketing, financial controls, and other necessary processes to ensure the successful start-up and long-term health of a business enterprise.

BA A201 Introduction to Alaska Native Business 1 Credit

Introduces students to the Alaska Native Claims Settlement Act (ANCSA) and Native business organizations. Examines career opportunities within these organizations.

Prerequisites: WRTG A111 with a minimum grade of C or WRTG A1W with a minimum grade of C.

BA A202 Alaska Native Organizations 3 Credits

Overview of the Alaska Native Claims Settlement Act (ANCSA) and amendments. Introduction to Alaska Native-focused organizations, including health organizations, regional corporations, village corporations, Community Development Quota (CDQ) groups, nonprofit economic development organizations, tribes, etc. Includes insights into organizational missions, goal-setting strategies and management approaches.

Prerequisites: BA A201 with a minimum grade of C.

BA A215 Introduction to Property Management 3 Credits

Introduces property management topics including career opportunities; residential, commercial and industrial management; property management finance; marketing; risk management; Landlord-Tenant law; and Fair Housing.

Registration Restrictions: UAA-approved mathematics placement test scores may be used in lieu of prerequisites.

Prerequisites: MATH A105 with a minimum grade of C or MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C.

BA A225 Leasing in Property Management 3 Credits

Examines the tools needed to produce telephone presentations, prospect interviews, demonstrations and Internet leasing. Also includes rental procedures, resident relations and leasing laws.

Special Note: Successful completion enables students to sit for a national leasing designation exam.

Registration Restrictions: UAA-approved mathematics placement test scores may be used in lieu of prerequisites.

Prerequisites: MATH A105 with a minimum grade of C or MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C.

BA A231 Fundamentals of Supervision 3 Credits

Introduces students to the supervisor's role in organizations.

Emphasizes development of the insights and skills necessary to achieve organizational objectives through others by effectively using the managerial functions of planning, organizing, leading, and controlling. Offers practical experience in decision making in contemporary and relevant situations facing today's supervisors.

BA A233 Survey of Finance 3 Credits

Surveys the discipline of finance. Topics covered are: financial markets, financial institutions, financial statements analysis, time value of money, capital budgeting, and methods of short-term and long-term financing.

Prerequisites: (ACCT A101 or ACCT A201) and MATH A105.

BA A241 Business Law I 3 Credits

Introduction to business law. Covers topics such as the American legal system, dispute resolution, constitutional and government regulation of business, torts, contract laws and theory, international law, and business ethics.

Crosslisted With: JUST A241.

BA A242 Business Law II 3 Credits

Continuation of Business Law I. Covers topics such as sales and leases, negotiables, debtor-creditor relations, agency, business organizations, and property protection.

Crosslisted With: JUST A242.

Prerequisites: BA A241 or JUST A241.

BA A260 Marketing Practices 3 Credits

Examines the tools, techniques and principles of marketing and how to apply them. Identifies the significance of connecting with customers. Examines and identifies market factors which create the greatest customer satisfaction possible in the highly competitive environments of the 21st century.

Prerequisites: BA A151.

BA A264 Personal Selling 3 Credits

Designed for students with or without sales experience. Explores skills all individuals use to sell themselves, goods, services and ideas. Offers opportunities for students to practice selling skills that will help them become better communicators throughout life.

BA A266 Retailing Management 3 Credits

Introduces students to the high-tech, global growth retail industry and its vital economic role in society. Covers retailing topics for brick and mortar retailers and electronic storefronts. Includes retailing strategy, merchandise management and store management.

Prerequisites: BA A151 with a minimum grade of C.

BA A273 Introduction to Statistics for Business and Economics 3 Credits

Introduces statistics and probability with an emphasis on the analysis of business and economic data. Includes descriptive statistics for univariate and bivariate data, elementary probability and sampling distributions, confidence intervals and hypothesis tests, and simple linear regression. Familiarizes students with statistical packages for data analysis.

Special Note: Students may apply no more than 3 credits from BA A273 or STAT A252 toward graduation requirements for a baccalaureate degree.

Prerequisites: CIS A110 with a minimum grade of C and (MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C or MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C).

BA A286 Entrepreneurship and Innovation 3 Credits

Introduces students to the requirements and strategies necessary for starting and developing new ventures. Covers a broad range of topics using class discussion, assigned readings, guest speakers and case analysis. Topics will include, but not be limited to, entrepreneurial thinking, opportunity recognition and assessment, funding and other resource requirements, growth issues, valuation, and managing the business.

Prerequisites: BA A166 with a minimum grade of C.

BA A287 Introduction to International Business 3 Credits

Examines successes and failures of business and management practices across different cultures. Introduces personal and professional skills that a global manager needs to succeed in an international context.

Prerequisites: WRTG A111 with a minimum grade of C or WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C or WRTG A1W with a minimum grade of C or WRTG A2W with a minimum grade of C.

BA A290A Alaska Native Business Practices 1-3 Credits

Introductory examination of topics and issues in Alaska Native business practices. Prominent leaders from the Native community are brought into direct classroom contact with students to discuss important business issues in rural Alaska and the larger Native community.

Special Note: Subtitle varies. May be repeated for credit with a different subtitle.

BA A295 Internship in Business Administration 3 Credits

Integrates classroom study with planned and supervised work experience in the public and private sectors. Students acquire essential practical skills by being exposed to an occupational work environment beyond the boundaries of the campus, enhancing self-confidence and career direction.

Special Note: May be repeated more than once for credit, but only 3 credits will apply to degree requirements.

Registration Restrictions: Permission of faculty internship coordinator; 2.75 GPA.

BA A300 Organizational Theory and Behavior 3 Credits

Centered on developing a working knowledge of the key theories that deal with human behavior in work settings. Content includes: individual differences, personality, attitudes, perception, attribution, and biases. Also includes the major theories of motivation and leadership, dynamics of group interaction, teams, social processes, diversity, organizational culture, and ethics.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

BA A302 Maintenance in Property Management 3 Credits

Presents numerous elements of property maintenance and the role managers play in operating properties. Topics include hiring practices, contractors and vendor management, inventory management, preventive maintenance, and customer service. Students shadow property maintenance technicians to gain exposure to the industry's pace and demand.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A215 with a minimum grade of C and BA A225 with a minimum grade of C.

BA A303 Real Estate Investment Finance 3 Credits

Examines the basics of finance as it applies to real estate investment and asset management. Topics include operating budgets, cash flow pro formas, performance measures and property valuations. Provides students with the tools to calculate revenue and expense management figures such as return on investment (ROI), net operating income (NOI), cash flow and internal rate of return (IRR).

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A215 with a minimum grade of C or BA A325 with a minimum grade of C.

BA A306 Real Estate Principles 3 Credits

Surveys licensee relationships; forms of ownership; property law and rights and limitations; forms of conveyances; contracts; financing instruments; Alaska real estate license law and Alaska landlord tenant law; and federal fair housing and RESPA laws.

Special Note: May fulfill pre-license education requirements for the Alaska Real Estate Salesperson License exam. Contact instructor for details.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: (BA A241 with a minimum grade of C or JUST A241 with a minimum grade of C) and ECON A201 with a minimum grade of C and (MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C or MATH A155 with a minimum grade of C or MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C).

BA A315 Property Management and Marketing 3 Credits

Surveys residential, retail, office and industrial property management; management contracts and lease agreements; landlord-tenant laws and federal fair housing laws; asset operating budgets and cash flow statements; and property leasing and marketing.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: (BA A241 with a minimum grade of C or JUST A241 with a minimum grade of C) and ECON A201 with a minimum grade of C and (MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C or MATH A155 with a minimum grade of C or MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C).

BA A320 Real Estate Finance 3 Credits

Surveys all aspects of real estate finance. Topics covered are interest rates, mortgages, federal housing policies, secondary mortgage markets, leverage and property valuation, taxation, and real estate in a portfolio context.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: (BA A241 with a minimum grade of C or JUST A241 with a minimum grade of C) and ECON A201 with a minimum grade of C and (MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C or MATH A155 with a minimum grade of C or MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C).

BA A325 Corporate Finance 3 Credits

Surveys the practice of corporate finance. Topics covered are financial statements analysis, valuation of securities, capital budgeting, risk and return, cost of capital, capital structure and working capital management.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A273 with a minimum grade of C.

BA A343 Principles of Marketing 3 Credits

Examines the present role and evolving scope of marketing in organizations and the global economy. Provides a comprehensive delineation of the key marketing terms, concepts, and decision paradigms; offers an overview of the requisite steps, strategic considerations, and essential elements involved in planning, implementing, and evaluating marketing activities and campaigns.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

BA A347 International Marketing 3 Credits

Emphasizes concepts of marketing strategy used to achieve competitive advantage in the global marketplace. Focuses on global consumer insights, market planning, organizing, coordinating and on the controlling functions of international marketing management.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper division standing

Prerequisites: BA A343 with a minimum grade of C.

BA A361 Human Resource Management 3 Credits

Provides students with an overview of human resource management in today's globally competitive and continually changing environment. Students gain an increased understanding of the importance of good human resource management in the current marketplace and learn to view human resource issues from both the strategic and tactical perspectives.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A300.

BA A375 Statistics for Business and Economics 3 Credits

Intermediate statistics and probability with emphasis on the analysis of business and economic data. Includes multivariate probability models; classic inferences for means, standard deviations, and proportions in one and two populations; analysis of variance; contingency tables; multiple regression and nonparametric statistics. Statistical computer packages are used extensively.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A273 with a minimum grade of C and (MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C).

BA A377 Operations Management 3 Credits

Introduces management of the operations/production system with an emphasis on quantitative analysis. Characteristics of systems, types of production and service systems, forecasting, planning and scheduling work, facility design and location, and selected topics in operations research will be covered.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A273 with a minimum grade of C and (MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C).

BA A380 Investment Management 3 Credits

Introductory course in investment management covering valuations and techniques of investment in financial securities. Evaluates investment choices including common stock, preferred stock, bonds, convertibles, mutual funds, closed end funds, hedge funds and private equity.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A325 with a minimum grade of C.

BA A381 Consumer Behavior and Relationship Management 3 Credits

Examines why consumers behave the way they do through exploring perceptions about consumption behaviors; theories developed in marketing, psychology and sociology; and applying these theories to predict how consumers will respond to marketing actions.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A343 with a minimum grade of C.

BA A383 Market Research: Methods, Metrics and Strategies 3 Credits

Examines the marketing research function and its role in the managerial decision-making process. Includes an overview of marketing research methods, metrics and strategies. Includes conducting primary and secondary data collection, analysis of statistical data, and preparing a written and oral research report.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A343 with a minimum grade of C and (BA A375 with a minimum grade of C or ECON A312 with a minimum grade of C).

BA A385 Intermediate Financial Management 3 Credits

Intermediate course in corporate finance utilizing advanced analytical techniques and concepts. Includes multifactor asset pricing models, free cash flow and corporate valuation, capital budgeting risk analysis and real options, capital structure theory, mergers, and corporate bankruptcies.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A325 with a minimum grade of C.

BA A386 The Startup Venture 3 Credits

Introduces concepts, theories and methods of commercializing a validated new business model for a new venture. Includes the venture capital funding process, the players involved in this process, strategies for raising capital, capitalization tables, negotiating tactics, and term sheets.

Prerequisites: BA A286 with a minimum grade of C.

BA A388 Globalization and Business Environment 3 Credits

Examines the external context in which businesses operate. Includes an assessment of the ethical, legal, political and social issues that organizations face in a global environment.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper division standing

BA A395 Property Management and Real Estate Internship 1-6 Credits

Integrates classroom knowledge with supervised work experience in property management and/or a related real estate environment.

Special Note: May be repeated, but only BBA Management majors with a concentration in property management and real estate may apply 6 credits to meeting degree requirements.

Registration Restrictions: Must be admitted to the BBA program; must be admitted to upper-division standing. Permission of the College of Business and Public Policy faculty internship coordinator; cumulative GPA of 2.75 or higher; 3.00 GPA in major.

Prerequisites: BA A215 with a minimum grade of C and BA A225 with a minimum grade of C.

BA A401 Alaska Native Corporation Business Management 3 Credits

Covers the history, development and management of Alaska Native corporations and their economic and social impact on Alaska. Compares Native and non-Native corporate structures and governance; strategies, goals and core competencies; management practices and performance; and future challenges.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A202 with a minimum grade of C.

BA A402 Indigenous Leadership 3 Credits

Explores leadership styles in Alaska Native organizations. Compares and contrasts indigenous and non-Native leadership characteristics.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A202 with a minimum grade of C.

BA A403 Inside the Boardroom of Alaska Native Organizations 1 Credit

Examines best practices and the roles and responsibilities of a board of directors. Explores the differences between various types of boards: tribal, Alaska Native corporation, for-profit and nonprofit.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A401 with a minimum grade of C.

BA A421 Property Management Capstone 3 Credits

An in-depth evaluation of an income property including a property description, regional and neighborhood analysis, market analysis, financial data, suggested alternatives, and final conclusions.

Special Note: Successful completion should prepare students to sit for the National Apartment Association Certified Apartment Manager (CAM) exam.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A215 with a minimum grade of C and BA A225 with a minimum grade of C and BA A302 with a minimum grade of C and BA A303 with a minimum grade of C.

BA A426 Financial Institutions 3 Credits

Study of the functions, structures, delivery systems, efficiencies, risk managements, and performances of financial institutions including banks, savings and loan associations, credit unions, investment companies, pension funds, mutual funds, and endowments.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A325 with a minimum grade of C.

BA A427 International Finance 3 Credits

Covers foreign exchange determination and forecasting; foreign exchange, translation and transaction risks; hedging and speculation; international portfolio diversification and direct foreign investment; international acquisitions; and international taxation.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A325 with a minimum grade of C.

BA A431 Real Estate Appraisal 3 Credits

Surveys all aspects of the real estate appraisal. Topics cover appraisal process, real estate economics, property inspection, sales comparison approach, cost approach, income approach, reporting appraisal opinion and the professional appraiser.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: ECON A201 with a minimum grade of C and (MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C or MATH A155 with a minimum grade of C or MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C).

BA A432 Real Estate Law 3 Credits

Surveys all aspects of the real estate law. Topics covered are legal system; scope of real property; types of ownership; real estate contracts; title and insurance; financing, closing and taxation; landlord and tenants; and environmental law and regulation.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A241 with a minimum grade of C or JUST A241 with a minimum grade of C.

BA A451 Advanced Investment Strategies 3 Credits

Advanced course in investment management covering problems and process of evaluating a particular stock. Discusses portfolio construction and management. Analyzes performance evaluation using fundamental, technical, and behavioral models and applies it to the portfolio project.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A380 with a minimum grade of C.

BA A452 Financial Derivatives 3 Credits

Advanced course in investment management on financial derivatives. Covers options, futures, options on futures, swap markets, and their use in managing interest rate risk and foreign exchange risk.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A325 with a minimum grade of C.

BA A453 Bond Market Analysis 3 Credits

Advanced course in investment management covering fixed-income securities. Covers bond fundamentals, types of debt instruments, term structure of interest rates, interest rate risks and their management, bond portfolio management, indexing, and performance evaluation.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A325 with a minimum grade of C.

BA A460 Marketing Management 3 Credits

Analysis of product, price, promotion, and distribution decisions from a strategic marketing planning perspective. Emphasizes marketing decision models applied to organizations.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A343.

BA A461 Negotiation and Conflict Management 3 Credits

Provides students with a forum to develop and practice negotiation skills and offers opportunities to make positive changes in negotiation behavior and habits.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

BA A462 Strategic Management 3 Credits

Evaluation of the external and internal market environments to formulate a strategic plan that achieves above-average returns. Analysis of theory, current events, company and industry analysis, and case studies to prepare students to understand, evaluate, and carry out strategic decisions in the global marketplace.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A273 with a minimum grade of C and BA A300 with a minimum grade of C and BA A325 with a minimum grade of C and BA A343 with a minimum grade of C.

BA A463 Branding and Content Marketing Strategies 3 Credits

Examines the content marketing strategies used to create, publish and distribute content for a target audience to attract new customers, including social media, blogs, visual content, and content assets such as tools, e-books and webinars.

Special Note: Not available for credit to students who have completed BA A682.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

May Be Stacked With: BA A682

Prerequisites: BA A343 with a minimum grade of C.

BA A470 Becoming a Leader 3 Credits

Provides an introduction to effective leadership. Topics such as the nature of leadership, recognizing leadership traits, developing leadership skills, overcoming obstacles, and addressing values in leadership will be examined. Attention will be given to helping students understand and improve their own leadership performance.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A300 with a minimum grade of C.

BA A480 Marketing Media Analytics 3 Credits

Introduces students to the field of marketing media analytics. Examines marketing media analytics to understand how a business tracks the data specific to their use of social media, how and when to share information, what types of content drives the consumer, and the impact of marketing on the business.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

May Be Stacked With: BA A680

Prerequisites: BA A343 with a minimum grade of C.

BA A481 Applications in Management 3 Credits

An in-depth, hands-on examination of management topics and issues introduced in BA A300. Students are encouraged to develop their own management skills through case analysis, role playing, in-class exercises, and projects that require interaction with practicing managers.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A300.

BA A483 Marketing Campaign Practicum and Portfolio 3 Credits

Allows students to put into practice competencies learned by executing an entrepreneurial or client-based project selected, developed, implemented and assessed across and throughout all their subsequent course work, resulting in a professional portfolio and presentation.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A381 with a minimum grade of C and BA A383 with a minimum grade of C and BA A463 with a minimum grade of C and BA A480 with a minimum grade of C.

BA A485 International Business Applications 3 Credits

Examines in-depth, hands-on international business issues. Requires students to develop international business skills through field experiences and interactions with faculty and practicing managers.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A287 with a minimum grade of C.

BA A486 Field Studies in International Business 3 Credits

Explores international business concepts and processes in the field. Develops international business knowledge and skills in a field trip. Topics range from regional markets to specific topical studies.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A287 with a minimum grade of C.

BA A489 From Startup to Growth 3 Credits

Conceptualizing and planning a new business; entrepreneurship and innovation for new and established organizations; stages in business growth and implications for management. Students are required to work with a new or existing business and provide the needed studies and plans required to establish or expand an existing business.

Registration Restrictions: College of Business and Public Policy BBA majors must be admitted to upper-division standing.

Prerequisites: BA A386 with a minimum grade of C or BA A462 with a minimum grade of C.

BA A490A Current Topics in Business 1-6 Credits

Explores current issues, techniques, and trends affecting business.

Special Note: May be repeated for credit with a change of subtitle up to a maximum of 6 credits.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

May Be Stacked With: BA A690

BA A490B Selected Topics in Alaska Native Corporations 1-3 Credits

Advanced examination of topics and issues in Alaska Native corporations. Brings prominent leaders from the Alaska Native corporation community into direct classroom contact with students to discuss important business topics.

Special Note: May be repeated for credit with change of subtitle.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

BA A490C Selected Topics in International Business 1-3 Credits

Examines current topics and issues in international business. Brings prominent leaders from business schools in overseas, federal government agencies, and business executives into direct classroom contact with students to discuss important international business topics.

Special Note: May be repeated for a maximum of 3 credits with change of subtitle.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: BA A287 with a minimum grade of C.

BA A495 Advanced Internship in Business Administration 3 Credits

Integrates classroom study with planned and supervised work experience in the public and private sectors. Students acquire essential practical skills by being exposed to occupational work environment beyond the boundaries of the campus, enhancing self-confidence and career direction. Students are expected to perform duties commensurate with entry-level management positions.

Special Note: May be repeated more than once for credit, but only 3 credits will apply to meeting business majors' degree requirements.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing; permission of the BA faculty internship coordinator; 2.75 GPA overall; 3.00 GPA in major.

BA A603 Fundamentals of Finance 3 Credits

Surveys the practice of corporate finance. Topics covered include time value of money, financial statements analysis, valuation of securities, capital budgeting, risk and return, and cost of capital.

Special Note: This is a foundational course for MBA students who have not taken any course in finance at the baccalaureate level. Does not count toward MBA degree.

Registration Restrictions: Graduate standing.

Prerequisites: ACCT A601.

BA A610 Business Intelligence and Analytics 3 Credits

Data identification, collection, analysis and presentation of results. Basic statistical tools and models for problem analysis and data-driven decision making are presented from the perspective of a manager. Emphasis is on the appropriate selection, use and interpretation of statistical analysis for business decision making. Computer software will be intensively used to analyze business datasets.

Registration Restrictions: Graduate standing.

BA A613 Applied Leadership 3 Credits

Students develop their leadership skills, exchange ideas and evaluate their internal image, enabling them to make positive changes in their behavior from a leadership context. Students learn theories and practices that affect organizational direction through understanding internal and external influences.

Registration Restrictions: Graduate standing

Prerequisites: BA A632 with a minimum grade of C.

BA A617 Technology Management 3 Credits

Explores technology management models and practices. Presents the nature and importance of technological change. Introduces tools to analyze and manage changes in technology-driven organizations.

Registration Restrictions: Graduate standing or instructor approval

Crosslisted With: ESM A617

BA A621 Change Leadership and Facilitation 3 Credits

Effective and successful approaches to change in complex organizations are the major objectives of this course. Develops students' capabilities to lead change at individual, group and organizational levels. Students will analyze situations that drive change in organizations and the application of theories and concepts for successful, sustainable implementation of change.

Registration Restrictions: Graduate standing

Prerequisites: BA A632.

BA A626 Strategic Leadership 3 Credits

Integrates and synergizes the concepts and principles learned in the MBA core and leadership concentration courses. Student teams will partner with a local organization to develop recommendations to solve a critical organizational problem or to develop a strategic plan.

Registration Restrictions: Graduate standing

Prerequisites: BA A621.

BA A627 Leadership in the Multicultural Organization 3 Credits

Examines leadership theories and concepts to understand how culture fits in a changing business world, how to gain a competitive advantage from effective cross-cultural management, and practicalities for doing business in an era of globalization. Explores factors, conditions and practices for business success to understand, communicate and lead across cultures.

Registration Restrictions: Graduate standing

Prerequisites: BA A632.

BA A628 Executive Leadership 3 Credits

Students synthesize leadership theories, practices and self-assessments so that they better understand challenges leaders face in organizations. Students are provided with opportunities to interact and network with top executives from the local business community. Executives share their leadership styles, knowledge and practical applications of theories.

Registration Restrictions: Admission to MBA program or permission of instructor

Prerequisites: BA A632.

BA A629 Negotiation and Conflict Management 3 Credits

Designed to result in students' improved negotiation skill. An experiential class in which skills are both learned and practiced, enabling students to obtain feedback and make positive changes in their behavior in negotiation contexts.

Registration Restrictions: Graduate standing

BA A631 Business Environment Analysis 3 Credits

Introduction to the methodology of business environment scanning, analysis, and forecasting; survey of the current business environment. Impacts of globalization of competition and financial markets, technological change, changing political systems, regulation, demographics, social change, and other change factors on business. Examination of social responsibility, ethics, environmental protection and other accountability issues.

Registration Restrictions: Graduate standing.

Prerequisites: ECON A602.

BA A632 Leadership and Organizational Behavior 3 Credits

Enable students to become effective and successful leaders and followers in organizations. Students develop an understanding of the dynamics of human behavior and acquire skills for motivating oneself, peers and subordinates. Topics include leading teams, building relationships and communicating across groups.

Registration Restrictions: Graduate standing

BA A633 Problem Formulation and Decision Analysis 3 Credits

Identification and formulation of business problems with alternative approaches to modeling and analysis. Students will undertake data collection and utilize appropriate software tools for optimization, forecasting, and simulation of business processes. Focuses on formal quantitative modeling with strong recognition of the behavioral and political contexts of decision making in complex organizations.

Registration Restrictions: Graduate standing.

Prerequisites: ECON A602.

BA A634 Organizational Design and Development 3 Credits

Explores factors, conditions and practices that lead to creating and maintaining organizational success. Examines alternative methods of determining organizational effectiveness. Presents organizational design based on contingency theory perspective and examines major organizational dilemmas and dysfunctions. Surveys and applies critical tools available for organizational development.

Registration Restrictions: Graduate standing.

BA A635 Current Marketing Issues Seminar 3 Credits

Explores the origin, nature, and ramifications of current issues in marketing that are redefining the role and scope of applied marketing management practices in contemporary organizations. Discusses the major ongoing socio-cultural and technological issues and trends impacting marketing research, competitive strategies, product/service design, pricing, promotion, and distribution.

Registration Restrictions: Graduate standing.

BA A636 Financial Decision Making 3 Credits

Advanced course in financial decision making presenting analytical techniques and concepts. Includes risk and return relationships, capital asset pricing model (CAPM) and Markowitz diversification, free cash flow and corporate valuation, options, and working capital management.

Registration Restrictions: Graduate standing

Prerequisites: BA A603.

BA A640 Global Marketing 3 Credits

Apply the concepts of marketing strategy to achieve competitive advantage in the global marketplace. Primary focus includes market planning, organizing, coordinating, and controlling functions of international marketing management.

Registration Restrictions: Graduate standing.

BA A641 Advanced Consumer Behavior 3 Credits

Explores the relationship between consumers and firms. Applies the concepts of contemporary behavioral science to business practices. Applies relevant concepts from the fields of cultural anthropology, sociology, and psychology to problems encountered in different consumer groups.

Registration Restrictions: Graduate standing.

BA A648 Business Intelligence and Data Mining 3 Credits

Covers basic business intelligence and data mining including data warehousing and querying. Applies business intelligence and data mining techniques to marketing campaigns, fraud detection and terrorism detection. Uses SAS Enterprise Miner to illustrate decision trees, classification algorithms and other data mining techniques. Students may apply for SAS Data Mining Certification.

Registration Restrictions: Graduate Standing and undergraduate statistics course with a minimum grade of C

Prerequisites: BA A273.

BA A649 Advanced Business Data Analysis 3 Credits

Analyze business data using popular statistical methods including ANOVA, ANCOVA, regression and logistical regression. Emphasizes the appropriate selection and use of statistical analysis methods based on variation pattern of observed business data. Present analysis results in an appropriate way for business decision making purposes. Statistical software package of SAS is intensively used to build statistical models for business data. This course will prepare students for the SAS certification exam for Statistical Business Analyst.

Registration Restrictions: Graduate standing

Prerequisites: BA A610.

BA A655 Strategic Management Seminar 3 Credits

Analysis of the strategic environment; formulation and implementation of strategy. Role of top management and other stakeholders in setting the organization's fundamental direction. Structure and control system design for strategic support.

Registration Restrictions: Graduate standing.

Prerequisites: BA A632 and BA A635 and BA A636.

BA A656 Management Project 3 Credits

Management research project designed to integrate policy concepts, research methods, and practical problem solving techniques.

Registration Restrictions: Completion of MBA core courses.

BA A671 Introduction to Entrepreneurship 3 Credits

Covers personal qualities of successful entrepreneurs, information required to start a new business venture, and ways to present and analyze the unique business problems that face entrepreneurs in starting and operating a new venture.

Registration Restrictions: Graduate standing

BA A672 Developing a Business Plan 3 Credits

Introduces the elements of a business plan that will attract investors. Students will prepare an investor presentation and deliver it to a business audience.

Registration Restrictions: Graduate standing

BA A673 Creating and Managing the Entrepreneurial Venture 3 Credits

Provides the fundamentals of attracting venture capital, building the infrastructure and implementing the business plan once it is drafted. Focused on the ways to attract human capital, build the management team and instill the culture necessary for new venture success.

Registration Restrictions: Graduate standing

BA A680 Marketing Media Analytics 3 Credits

Provides strategic knowledge and insights into the field of marketing media analytics. Assess, interpret and apply marketing media analytics to understand how a business tracks the data specific to their use of social media, how and when to share information, what types of content drives the consumer, and the impact of marketing on the business.

Special Note: Not available for credit to students who have completed BA A480.

Registration Restrictions: Graduate standing

May Be Stacked With: BA A480

BA A682 Branding and Content Marketing Strategies 3 Credits

Analyzes the content marketing strategies used to create, publish and distribute content for a target audience to attract new customers, including social media, blogs, visual content, and content assets such as tools, e-books and webinars.

Special Note: Not available for credit to students who have completed BA A463.

Registration Restrictions: Graduate standing

May Be Stacked With: BA A463

Prerequisites: BA A635.

BA A686 Management Simulation 3 Credits

Students experience running a business as a member of a senior management team. Teams select competitive strategies, execute them within a simulated online decision-making framework, and examine how a firm's production, marketing, R&D, HR and financial operations interact with one another in a competitive market. Teams compete simultaneously with fellow classmates and student teams from universities around the world.

Registration Restrictions: Graduate standing and completion of undergraduate or graduate course in finance and accounting.

BA A690 Advanced Topics in Business 1-6 Credits

Examines current issues, techniques, and trends affecting business and applies advanced theories to analyze and solve business problems.

Special Note: May be repeated for credit with a change in subtitle up to a maximum of 6 credits.

Registration Restrictions: Faculty permission and graduate standing.

May Be Stacked With: BA A490A

BA A695 Graduate Internship 3 Credits

Integrates classroom study with planned and supervised work experience in the public and private sectors. Students acquire essential practical skills to enhance self-confidence and career direction by being exposed to occupational work environments beyond the boundaries of the campus.

Registration Restrictions: Graduate standing, completion of MBA core courses

BA A698 MBA Individual Research 3 Credits

Independent primary research project conducted under the supervision of a faculty advisor.

Registration Restrictions: Graduate standing and completion of MBA core courses

BA A699 Thesis 6 Credits

Independent research project conducted under supervision of a thesis advisor and committee, culminating in a formal thesis and oral defense.

Registration Restrictions: Graduate standing and completion of MBA core courses

COH Interprofessional (COHI)

Courses

COHI A201 Specimen Collection for Non-laboratory Personnel 3 Credits

Introduces concepts, procedures, and equipment used in the collection of blood and non-blood specimens. Topics include infection control, biohazards, test ordering, specimen collection, handling and transport, specimen quality and interprofessional communications.

Registration Restrictions: Departmental approval

COHI A478 Interdisciplinary Exploration of Alaska's Critical Behavioral Health Issues 3 Credits

Engages students in an in-depth, interdisciplinary exploration of Alaska's critical behavioral health issues, including domestic violence and sexual assault, substance abuse, mental health, and suicide. Examines theoretical causation, prevention response, and intervention from the following discipline perspectives: justice, social work, human services, nursing and public health.

Special Note: Not available for credit to students who have completed COHI A678.

Registration Restrictions: Junior or senior standing

May Be Stacked With: COHI A678

COHI A678 Interdisciplinary Exploration of Alaska's Critical Behavioral Health Issues 3 Credits

Engages students in an in-depth, interdisciplinary exploration of Alaska's critical behavioral health issues, including domestic violence and sexual assault, , substance abuse, mental health, and suicide. Examines theoretical causation, prevention response, and intervention from the following discipline perspectives: justice, social work, human services, nursing and public health.

Special Note: Not available for credit to students who have completed COHI A478.

Registration Restrictions: Graduate standing

May Be Stacked With: COHI A478

Career & Technical Education (CTE)

Courses

CTE A411 Historical and Philosophical Foundations of Career and Technical Education 3 Credits

Studies history, theory, development, and philosophical foundations of career and technical education. Examines career and technical education, including secondary, postsecondary, and applied programs, along with models of career education including career clusters.

Registration Restrictions: Junior or senior standing or departmental approval

May Be Stacked With: CTE A611

CTE A611 Historical and Philosophical Foundations of Career and Technical Education 3 Credits

Studies history, theory, development, and philosophical foundations of career and technical education. Examines career and technical education, including secondary, postsecondary, and applied programs, along with models of career education including career clusters.

Registration Restrictions: Graduate standing.

May Be Stacked With: CTE A411

CTE A633 Current Issues in Career and Technical Education 3 Credits

Studies and analyzes recent trends, research, and issues concerning career and technical education, with a focus on evaluation, interpretation and sources. Identifies national and statewide problems, including legislation and special populations.

Registration Restrictions: Graduate standing.

CTE A643 Teaching in Career and Technical Education 3 Credits

Explores teaching strategies, applied research regarding learning, and concept development in Career and Technical Education (CTE). Evaluates content and materials. Examines teaching and learning to facilitate application in the classroom or training situation. Provides fundamentals of standards-based curriculum design and assessment for CTE.

Registration Restrictions: Graduate standing.

CTE A655 Curriculum and Assessment in Career and Technical Education 3 Credits

Examines principles and procedures in the development of career and technical education curriculum. Studies theory and principles of quality assessment and assessment techniques. Addresses current trends in career and technical education curriculum and assessment, including programs of study and third party assessment.

Registration Restrictions: Graduate standing.

CTE A695 Internship 1-9 Credits

Supervised internship in a 7-12 public school. Internship develops teaching proficiency in career and technical education. Includes periodic on-campus seminars that emphasize theory-based inquiry into teaching and learning.

Special Note: This course operates in accordance with the K-12 school year calendar, not the university academic year calendar. Placement is arranged and supervised by the College of Education, in partnership with staff from the public school site and with faculty in the Community & Technical College. Partners may limit registration. Completion of 9 credits is required for the MAT.

Registration Restrictions: Departmental approval required. Placement availability may result in registration restrictions. Includes coursework and fingerprinting, Alaska Student Teacher Authorization and medical clearance.

Prerequisites: (CTE A611 and EDFN A601) or (EDFN A601 and EDFN A602 and EDFN A603).

CTE A695C Advanced Professional Experiences 1-6 Credits

Provides academic rigor to internships, externships, and other structured professional development activities in career and technical education. Course applies to all aspects of industry and support students' professional objectives.

Registration Restrictions: Graduate standing and faculty permission.

CTE A698 Individual Research 1-6 Credits

Facilitates the development of a research paper/project and presentation jointly approved by the student's graduate committee and the student. Supports research that coincides with the student's professional objectives.

Registration Restrictions: Graduate standing and advisor permission. Completion of or concurrent enrollment in research courses by advisement.

Chemistry (CHEM)

Courses

CHEM A054 Chemistry Skills and Problem Solving 3 Credits

A preparatory chemistry course for students without high school chemistry or with limited mathematics background. Develops foundational problem-solving skills using basic models of chemistry. CHEM A054 is the preparatory course for CHEM A103 and CHEM A105.

Prerequisites: MATH A105 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C or MATH A155 with a minimum grade of C or ALEKS Overall Test 1 with a score of 055 or ALEKS Overall Test 2 with a score of 055 or ALEKS Overall Test 3 with a score of 055 or ALEKS Overall Test 4 with a score of 055 or ALEKS Overall Test 5 with a score of 055.

CHEM A055 Contemporary Chemistry 3 Credits

Introductory course for students with little or no chemistry background. Covers units of measurement, matter, atoms, periodic table, nomenclature, equations, oxidation-reduction, solutions, calculations, and problem solving.

Prerequisites: MATH A055 with a minimum grade of C or MATH A105 with a minimum grade of C or MATH A151 with a minimum grade of C.

CHEM A103 Introduction to General Chemistry 3 Credits

Introductory chemistry survey course for health science majors and preparatory course for science majors. Topics include: measurement, energy and matter, periodic trends, chemical composition, chemical reactions, solutions, bond theory, phases, oxidation-reduction, nuclear chemistry, problem-solving (applied mathematics), and special topics.

Special Note: This course assumes prior knowledge of algebra and high school chemistry. CHEM A103L is the laboratory component of this course and requires a separate registration.

Prerequisites: CHEM A054 with a minimum grade of P or CHEM A055 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C or MATH A155 with a minimum grade of C or MATH A251 with a minimum grade of C or ALEKS Overall Test 1 with a score of 065 or ALEKS Overall Test 2 with a score of 065 or ALEKS Overall Test 3 with a score of 065 or ALEKS Overall Test 4 with a score of 065 or ALEKS Overall Test 5 with a score of 065.

Attributes: UAA Natural Sciences GER.

CHEM A103L Introduction to General Chemistry Laboratory 1 Credit

Introductory chemistry laboratory course with experiments designed to introduce students to the basics of laboratory equipment, experimental methodology, data collection, data analysis and reporting. This course illustrates, augments and applies concepts covered in CHEM A103.

Special Note: Students who do not meet the prerequisites for this course may be administratively dropped at the discretion of the faculty. Attendance is mandatory for all chemistry laboratory courses the first week of class. Unless prior arrangements are made with the instructor, any student who does not attend the first scheduled meeting for this lab may be administratively dropped and a student on a waiting list will be added in their place. Any fees resulting from either of these drop procedures or any late registration procedure will be the responsibility of the student.

Prerequisites: CHEM A103 with a minimum grade of C or concurrent enrollment.

Attributes: UAA Natural Sci Lab Only GER.

CHEM A104 Introduction to Organic and Biochemistry 3 Credits

This is the second semester course in the sequence for health science majors and comprises a survey of the fundamentals of chemistry as applied to biological systems. Topics include: nomenclature of organic compounds, organic functional groups and reactions, biochemical processes and pathways, biological macromolecules, and metabolites.

Special Note: CHEM A104L is the lab component of this course and requires a separate registration.

Prerequisites: CHEM A103 with a minimum grade of C or CHEM A105 with a minimum grade of C.

Attributes: UAA Natural Sciences GER.

CHEM A104L Introduction to Organic and Biochemistry Laboratory 1 Credit

Second semester introductory chemistry laboratory course with experiments designed to reinforce concepts, including the basics of laboratory equipment, experimental methodology, data collection, data analysis and reporting. This course illustrates, augments and applies concepts covered in CHEM A104.

Special Note: Students who do not meet the prerequisites for this course may be administratively dropped at the discretion of the faculty. Attendance is mandatory for all chemistry laboratory courses the first week of class. Unless prior arrangements are made with the instructor, any student who does not attend the first scheduled meeting for this lab may be administratively dropped and a student on a waiting list will be added in their place. Any fees resulting from either of these drop procedures or any late registration procedure will be the responsibility of the student. Pregnant students should be aware that they will be using chemicals in this course that are teratogenic and may cause harm to unborn children.

Prerequisites: CHEM A103L with a minimum grade of C and CHEM A104 with a minimum grade of C or concurrent enrollment.

Attributes: UAA Natural Sci Lab Only GER.

CHEM A105 General Chemistry I 3 Credits

Introduces general chemistry and explores topics to a much greater depth than preparatory courses. Topics include: measurement, energy and matter, periodic trends, chemical composition, chemical reactions, solutions, bond theory, gases, thermodynamics, problem-solving (applied mathematics) and special topics.

Special Note: Assumes prior knowledge of algebra and high school chemistry. CHEM A105L is the lab component of this course and requires a separate registration.

Prerequisites: CHEM A054 with a minimum grade of P or CHEM A055 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C or MATH A155 with a minimum grade of C or MATH A251 with a minimum grade of C or ALEKS Overall Test 1 with a score of 065 or ALEKS Overall Test 2 with a score of 065 or ALEKS Overall Test 3 with a score of 065 or ALEKS Overall Test 4 with a score of 065 or ALEKS Overall Test 5 with a score of 065.

Attributes: UAA Natural Sciences GER.

CHEM A105L General Chemistry I Laboratory 1 Credit

Introductory chemistry laboratory course with experiments designed to introduce students to the basics of laboratory equipment, experimental methodology, data collection, data analysis and reporting. This course illustrates, augments and applies concepts covered in CHEM A105.

Special Note: Students who do not meet the prerequisites for this course may be administratively dropped at the discretion of the faculty. Attendance is mandatory for all chemistry laboratory courses the first week of class. Unless prior arrangements are made with the instructor, any student who does not attend the first scheduled meeting for this lab may be administratively dropped and a student on a waiting list will be added in their place. Any fees resulting from either of these drop procedures or any late registration procedure will be the responsibility of the student.

Prerequisites: CHEM A105 with a minimum grade of C or concurrent enrollment.

Attributes: UAA Natural Sci Lab Only GER.

CHEM A105R General Chemistry I Recitation 1 Credit

Provides direction and review of the concepts and calculations covered in General Chemistry I.

Corequisites: CHEM A105.

CHEM A106 General Chemistry II 3 Credits

The second semester in the general chemistry sequence. Topics include: kinetics, equilibrium chemistry (including acids and bases, solubility, and complex ion formation), nuclear chemistry, electrochemistry, thermodynamics and special topics.

Special Note: CHEM A106L is the laboratory component of this course and requires a separate registration.

Prerequisites: CHEM A105 with a minimum grade of C.

Attributes: UAA Natural Sciences GER.

CHEM A106L General Chemistry II Laboratory 1 Credit

Second semester introductory chemistry laboratory course with experiments designed to reinforce concepts, including the basics of laboratory equipment, experimental methodology, data collection, data analysis and reporting. This course illustrates, augments and applies concepts covered in CHEM A106.

Special Note: Students who do not meet the prerequisites for this course may be administratively dropped at the discretion of the faculty. Attendance is mandatory for all chemistry laboratory courses the first week of class. Unless prior arrangements are made with the instructor, any student who does not attend the first scheduled meeting for this lab may be administratively dropped and a student on a waiting list will be added in their place. Any fees resulting from either of these drop procedures or any late registration procedure will be the responsibility of the student.

Prerequisites: CHEM A105L with a minimum grade of C and CHEM A106 with a minimum grade of C or concurrent enrollment.

Attributes: UAA Natural Sci Lab Only GER.

CHEM A106R General Chemistry II Recitation 1 Credit

Provides direction and review of the concepts and calculations covered in General Chemistry II.

Corequisites: CHEM A106.

CHEM A208 Principles of Bioinorganic Chemistry 3 Credits

Study of introductory inorganic chemistry concepts with a focus on biologically-active, organometallic compounds.

Prerequisites: CHEM A106 with a minimum grade of C.

CHEM A218 Experiential Learning: Quantitative Chemical Analysis 5 Credits

Introduces the foundational methods and theories associated with quantitative analysis of chemical substances. Learning activities present students with conceptual and chemical models followed by questions to guide them through the learning cycle of structured scientific evaluation of analytical data. Introduces the fundamentals of quantitative chemical analysis, including the basics of experimental design, analytical controls, statistical methods of data analysis, data presentation, and how to discriminate between sound and unsound data. Activities promote independent operations of solution preparation, titration, spectrophotometry and chromatography.

Special Note: Pregnant students should be aware that they will be using chemicals in this course that are teratogenic and may cause harm to unborn children.

Prerequisites: CHEM A106 with a minimum grade of C and CHEM A106L with a minimum grade of C.

CHEM A253 Principles of Inorganic Chemistry 3 Credits

Study of theoretical and practical aspects of chemical bonding, descriptive periodic trends, and molecular structure and symmetry of molecules. A special emphasis is given to the chemistry of the transition metals, including coordination and organometallic chemistry.

Prerequisites: CHEM A106 with a minimum grade of C.

CHEM A312 Quantitative Analysis 5 Credits

General principles of chemical analysis, including introduction to volumetric, gravimetric and instrumental methods, theory, problems, and laboratory.

Special Note: Pregnant students should be aware that they will be using chemicals in this course that are teratogenic and may cause harm to unborn children.

Prerequisites: CHEM A106 with a minimum grade of C and CHEM A106L with a minimum grade of C.

CHEM A321 Organic Chemistry I 3 Credits

Investigates the chemistry of carbon compounds including alkanes, alkenes, alkynes, alkyl halides, and arenes. Discusses physical properties, nomenclature, synthesis, reactions, reaction mechanisms, and stereochemistry of these compounds.

Prerequisites: CHEM A106 with a minimum grade of C.

CHEM A321R Organic Chemistry I Recitation 1 Credit

Provides direction and review of the concepts covered in Organic Chemistry I.

Corequisites: CHEM A321.

CHEM A322 Organic Chemistry II 3 Credits

Continuation of CHEM A321. Includes the study of spectroscopic properties, delocalized electron systems, aromatic reactions, carbonyl compound reactions and amines. Emphasizes nomenclature, physical properties, synthetic methods and reaction mechanisms.

Special Note: It is strongly recommended that students register in CHEM A322 within one year of completing CHEM A321.

Prerequisites: CHEM A321 with a minimum grade of C.

CHEM A322R Organic Chemistry II Recitation 1 Credit

Provides direction and review of the concepts covered in Organic Chemistry II.

Corequisites: CHEM A322.

CHEM A323L Organic Chemistry Laboratory 2 Credits

A practical implementation of the theory learned in CHEM A321 and A322. Purification techniques, spectroscopic methods and synthetic methods of organic compounds will be taught.

Special Note: It is strongly recommended that students who wish to co-register in CHEM A322 and CHEM A323L complete CHEM A321 with a minimum grade of B. Students who complete CHEM A321 with a grade of C are strongly recommended to pass CHEM A322 prior to registering in CHEM A323L. Students who do not meet the prerequisites for this course may be administratively dropped at the discretion of the faculty. Attendance is mandatory for all chemistry laboratory courses the first week of class. Unless prior arrangements are made with the instructor, any student who does not attend the first scheduled meeting for this lab may be administratively dropped and a student on a wait list will be added in their place. Any fees resulting from either of these drop procedures or any late registration procedure will be the responsibility of the student. Pregnant students should be aware that they will be using chemicals in this course that are teratogenic and may cause harm to unborn children.

Prerequisites: CHEM A106L with a minimum grade of C and CHEM A321 with a minimum grade of C and CHEM A322 with a minimum grade of C or concurrent enrollment.

CHEM A332 Physical Chemistry II 3 Credits

Principles of quantum mechanics with application to atomic and molecular structure and spectroscopy. Introduction to statistical mechanics.

Special Note: MATH A302 is strongly recommended.

Prerequisites: PHYS A303 with a minimum grade of C and MATH A314 with a minimum grade of C.

CHEM A411 Biophysical Chemistry 3 Credits

Study of principles of thermodynamics, equilibrium, and kinetics with a focus on biochemical systems.

May Be Stacked With: CHEM A611

Prerequisites: CHEM A106 with a minimum grade of C and MATH A251 with a minimum grade of C and PHYS A124 with a minimum grade of C.

CHEM A418 Experiential Learning: Chemical Instrumentation and Methods 5 Credits

An experiential learning course that includes discussion of theories and concepts, and extensive laboratory exercises in qualitative and quantitative analysis of chemical compounds, with applications to health sciences, biomedical sciences, environmental sciences and geosciences.

May Be Stacked With: CHEM A618

Prerequisites: CHEM A218 with a minimum grade of C and CHEM A321 with a minimum grade of C.

CHEM A434 Instrumental Methods 5 Credits

Techniques in operating new and specialized instruments for qualitative and quantitative analysis and analytical methods of an advanced nature. For students in chemistry and allied fields.

May Be Stacked With: CHEM A634

Prerequisites: CHEM A312 with a minimum grade of C.

CHEM A441 Principles of Biochemistry I 3 Credits

A study of the structure and function of various biomolecules, including amino acids, proteins, carbohydrates, nucleic acids, lipids and membranes.

Special Note: Students who complete CHEM A441 as part of their undergraduate degree cannot receive credit toward their graduate degree from CHEM A641.

May Be Stacked With: CHEM A641

Prerequisites: BIOL A108 with a minimum grade of C and CHEM A321 with a minimum grade of C.

Attributes: UAA Integrative Capstone GER.

CHEM A442 Principles of Biochemistry II 3 Credits

A study of the bioenergetics and the metabolic pathways of amino acids, proteins, carbohydrates, nucleic acids and lipids.

Special Note: Students who complete CHEM A442 as part of their undergraduate degree cannot receive credit toward their graduate degree from CHEM A642.

May Be Stacked With: CHEM A642

Prerequisites: CHEM A441 with a minimum grade of C.

CHEM A443 Biochemistry Laboratory 2 Credits

Provides instruction in modern biochemical laboratory techniques.

Prerequisites: CHEM A441 with a minimum grade of C.

CHEM A450 Environmental Chemistry 3 Credits

Examines the origin and evolution of the environment, energy, mineral resources, solid wastes, recycling, air and water pollution, and the effects of foreign substances on living systems. The relationships among these problems will be demonstrated and quantitative chemical principles applied.

Special Note: This course is an introduction to environmental chemistry for all science majors.

Registration Restrictions: Instructor approval

Prerequisites: CHEM A106 with a minimum grade of C.

CHEM A456 Nonlinear Dynamics and Chaos 3 Credits

An introduction to nonlinear dynamics and chaos. Concrete examples from physics, biology, chemistry, and engineering are used to develop analytical methods and geometric intuition. Topics covered include phase plane analysis, iterated maps, fractals, and strange attractors.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing.

Crosslisted With: BIOL A456 and PHYS A456

Prerequisites: MATH A253 with a minimum grade of C and (PHYS A124 with a minimum grade of C or PHYS A212 with a minimum grade of C).

Attributes: UAA Integrative Capstone GER.

CHEM A471 Immunology 3 Credits

Fundamental concepts of immunology including cells and tissues of the immune system, innate immunity, lymphocyte development, antigenicity, cytokine signaling, antibody responses, immunotherapies and vaccines. Discusses comparative immunological evolution of non-human species. Emphasizes immunological aspects of human disease including host-pathogen interactions, autoimmune diseases, immunodeficiencies and cancer.

Crosslisted With: BIOL A471.

Prerequisites: BIOL A242 with a minimum grade of C and BIOL A252 with a minimum grade of C.

CHEM A477 Bioanalytical Chemistry 5 Credits

Techniques in operating instrumentation and laboratory methods for the analysis of biomolecules.

Special Note: For students in biology, chemistry and allied fields.

May Be Stacked With: CHEM A677

Prerequisites: CHEM A312 with a minimum grade of C or CHEM A441 with a minimum grade of C.

CHEM A480 Molecular Spectroscopy and Structure 3 Credits

Introduction to determining constitutional and stereochemical structure of chemical compounds using spectroscopic methods (mass spectrometry, nuclear magnetic resonance, infrared, ultraviolet), with applications to health, biomedical and environmental sciences.

May Be Stacked With: CHEM A680

Prerequisites: CHEM A322 with a minimum grade of C.

CHEM A481 Experiential Learning: Undergraduate Seminar I 1 Credit

Introduction to the techniques and style of technical oral presentation generally accepted by professional chemists.

Registration Restrictions: Department approval

CHEM A482 Experiential Learning: Undergraduate Seminar II 2 Credits

Continuation of instruction on the techniques and style of technical oral presentation generally accepted by professional chemists.

Prerequisites: CHEM A481 with a minimum grade of C.

CHEM A490 Selected Lecture Topics in Chemistry 1-3 Credits

Detailed coverage of a selected lecture topic in chemistry presented at a breadth and depth appropriate for upper division undergraduate science studies. Activities will vary according to the topic. For students in chemistry and allied fields.

Special Note: May be repeated for a maximum of 12 credits with change of subtitle. Prerequisites and corequisites may vary with topic.

Registration Restrictions: Junior or senior standing and instructor approval

May Be Stacked With: CHEM A690

CHEM A492 Undergraduate Seminar 1 Credit

Topical subjects in chemistry and biochemistry presented by undergraduate students.

Special Note: May be repeated once for credit.

Registration Restrictions: Junior or senior standing and department chair permission.

CHEM A495 Chemistry Internship 3 Credits

Work experience in an approved position with supervision and training in various agencies and businesses. Exposes student to work environment beyond the campus setting to acquire essential practical skills and enhance self-confidence and career direction.

Special Note: May be repeated once for credit.

Registration Restrictions: Junior or senior standing and department chair approval

CHEM A498 Individual Research 1-6 Credits

Discipline-specific research for undergraduate students. Topic of study to be approved and mentored by a faculty member.

Special Note: May be repeated for a maximum of 6 credits.

Registration Restrictions: Department approval

CHEM A611 Advanced Biophysical Chemistry 3 Credits

Advanced study of biophysical chemistry through the principles of thermodynamics, equilibrium and kinetics with a focus on biochemical systems. Introduction to computational techniques in physical chemistry. Examination of the current literature in biophysical chemistry.

Special Note: Not available for credit to students who have completed CHEM A411.

Registration Restrictions: Instructor permission and graduate standing

May Be Stacked With: CHEM A411

CHEM A618 Experiential Learning: Advanced Chemical Instrumentation and Methods 5 Credits

An advanced experiential learning course that includes discussion of theories and concepts, and extensive laboratory exercises in qualitative and quantitative analysis of chemical compounds, with applications to health sciences, biomedical sciences, environmental sciences and geosciences.

Special Note: Not available for credit to students who have completed CHEM A418.

Registration Restrictions: Graduate standing and instructor approval

May Be Stacked With: CHEM A418

CHEM A634 Advanced Instrumental Methods 5 Credits

Lectures are concurrent with CHEM A434. A study of techniques in operating new and specialized instruments for qualitative and quantitative analysis and analytical methods of an advanced nature. Topics are appropriate for students in chemistry and allied fields. Graduate students will be required to develop an instrumental method, to submit a research paper summarizing their findings, including designs for future experiments on the subject and to give a seminar on the topic.

Special Note: Not available for credit to students who have completed CHEM A434.

May Be Stacked With: CHEM A434

Prerequisites: CHEM A312 with a minimum grade of C.

CHEM A641 Advanced Biochemistry I 3 Credits

In depth study of the structure and function of various biomolecules, including amino acids, proteins, carbohydrates, nucleic acids, lipids and membranes.

Special Note: Not available for credit to students who have taken CHEM A441.

Registration Restrictions: Graduate standing; a course in organic chemistry and a course in biology, or instructor permission.

May Be Stacked With: CHEM A441

CHEM A642 Advanced Biochemistry II 3 Credits

In-depth study of the bioenergetics and the metabolic pathways of amino acids, proteins, carbohydrates, nucleic acids and lipids.

Special Note: Not available for credit to students who have taken CHEM A442.

Registration Restrictions: Graduate standing

May Be Stacked With: CHEM A442

Prerequisites: CHEM A641 with a minimum grade of B.

CHEM A677 Advanced Bioanalytical Chemistry 5 Credits

Advanced techniques in operating instrumentation and laboratory methods for the analysis of biomolecules. Graduate students will be required to develop a bioanalytical technique in the lab and give a seminar on their findings.

Special Note: Not available for credit to students who have completed CHEM A477.

Registration Restrictions: Graduate standing and instructor approval

May Be Stacked With: CHEM A477

CHEM A680 Advanced Molecular Spectroscopy and Structure 3 Credits

Advanced molecular spectroscopy theory and principles for structural analysis. Literature will be reviewed with regard to recent applications to health, biomedical and environmental sciences.

Special Note: Not available for credit to students who have completed CHEM A480.

Registration Restrictions: Graduate standing and instructor approval

May Be Stacked With: CHEM A480

CHEM A690 Advanced Lecture Topics in Chemistry 1-3 Credits

Advanced coverage of selected lecture topics in chemistry presented at a breadth and depth appropriate for graduate studies. Exposure to the topic will rely extensively on independent review of literature supplemented with text and lecture for references.

Special Note: May be repeated for a maximum of 12 credits with change in subtitle. Prerequisites and corequisites may vary with topic.

Registration Restrictions: Graduate standing

May Be Stacked With: CHEM A490

CHEM A698 Graduate Research 1-6 Credits

Discipline-specific research for graduate students. Topic of study to be approved and directed by a faculty member.

Special Note: May be repeated for a maximum of 12 credits.

Registration Restrictions: Graduate standing and permission of graduate advisor

CHEM A699 Graduate Thesis 1-6 Credits

Development, preparation, and completion of thesis at a graduate level. May be repeated for a maximum of 6 credits.

Registration Restrictions: Graduate standing and instructor permission.

Chinese (CHIN)

Courses

CHIN A101 Elementary Chinese I 4 Credits

Introductory course for students with no previous knowledge of the Chinese language. Develops listening, speaking, reading, and writing skills in Chinese for effective communication at the elementary level. Introduces basic cross-cultural perspectives. Course conducted in Chinese.

Attributes: UAA Humanities GER.

CHIN A102 Elementary Chinese II 4 Credits

Continuation of introductory course. Further develops elementary listening, speaking, reading, and writing skills in Chinese for effective communication. Enhances appreciation of cross-cultural perspectives. Course conducted in Chinese.

Prerequisites: CHIN A101.

Attributes: UAA Humanities GER.

CHIN A201 Intermediate Chinese I 4 Credits

Intermediate course for students with basic knowledge of Chinese. Enhances listening, speaking, reading and writing skills for effective communication at the intermediate level. Students critically examine diverse cultural perspectives. Course conducted in Chinese.

Prerequisites: CHIN A102.

Attributes: UAA Humanities GER.

CHIN A202 Intermediate Chinese II 4 Credits

Continuation of first semester in intermediate Chinese. Further develops listening, speaking, reading and writing proficiency for effective communication and in preparation for advanced study of Chinese. Students interpret diverse cultural perspectives. Course conducted in Chinese.

Prerequisites: CHIN A201.

Attributes: UAA Humanities GER.

Civic Engagement & Learning (CEL)

Courses

CEL A292 Introduction to Civic Engagement 3 Credits

Introduces students to types of civic engagement in a democracy, practices of engagement and inquiry, and public issues of ethics, sustainability, community-building, and human and civil rights through readings, reflections and a service-learning placement or project.

Special Note: This course is an active discussion seminar and serves as a social sciences GER.

Attributes: UAA Social Sciences GER.

CEL A390 Special Topics in Civic Engagement 1-3 Credits

Variable topics course addressing current issues in civic engagement, a field of study which prepares students to be active, effective, and ethical citizens in their professional and personal lives. Topics of local, national, and international interest will be included.

Special Note: May be repeated for credit with a change of subtitle up to a maximum of 9 credits.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses.

CEL A392 Civic Engagement: Learning by Giving 3 Credits

Applies learning about the history and practice of philanthropy with an overview of the non-profit sector and current issues and trends across the state and municipality. Students review and critique local grant proposals and award grant funds provided by local and national private benefactors to fulfill their proposals.

Registration Restrictions: Junior or senior standing or instructor permission

CEL A395 Civic Engagement Internship 3-9 Credits

Internship in which student gains intensive experience applying principles of civic engagement and major-disciplinary knowledge and skills to a community-identified problem.

Special Note: Students complete approximately 135 hours, usually in a community non-profit or government agency.

Registration Restrictions: Junior or senior standing and completion of GER Tier 1 (basic college-level skills) courses and instructor approval.

CEL A450 Civic Engagement Leadership Capstone 3 Credits

Integrates and applies disciplinary coursework and GER foundational skills of critical thinking, communication and collaboration with an interdisciplinary focus on civic responsibility. Critically examines civic pathways for leadership in local, state, national and/or global contexts through an individual civic engagement project.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) and junior/senior standing

Attributes: UAA Integrative Capstone GER.

Civil Engineering (CE)

Courses

CE A201 Introduction to Civil Engineering 1 Credit

Introduces students to roles, responsibilities, and capabilities of the various civil engineering sub-disciplines including structural, geotechnical, transportation, environmental, and water resources engineering.

Prerequisites: ENGR A151 with a minimum grade of C and MATH A251 with a minimum grade of C or concurrent enrollment.

CE A310 Introduction to Geotechnical Engineering 3 Credits

Introduces fundamentals of geotechnical engineering, including identification and classification of soil, physical and mechanical properties of soil, subsurface exploration, laboratory testing techniques, seepage, compaction, stresses in soil, soil consolidation, drained and undrained shear strength of soil, and cold regions special issues such as frost action.

Prerequisites: CE A334 with a minimum grade of C and ES A331 with a minimum grade of C.

CE A310L Introduction to Geotechnical Engineering Lab 1 Credit

Introduces the theory and procedures of routine soil tests. Provides hands-on experience of soil testing. Introduces skills on how to write a soil testing report. This course is taught in conjunction with CE A310 Introduction to Geotechnical Engineering.

Corequisites: CE A310.

CE A334 Properties of Materials 2 Credits

Introduces experimental investigation of the properties of civil engineering materials and the basic principles of mechanics. Discusses bonding and structure of materials at the molecular level and relationship to engineering properties. Discusses concrete mix design, asphalt testing and the use of standard testing procedures for analyzing other engineering materials.

Prerequisites: ES A302 with a minimum grade of C or concurrent enrollment and CE A201 with a minimum grade of C and ES A331 with a minimum grade of C or concurrent enrollment.

CE A334L Properties of Materials Laboratory 1 Credit

Introduces the theory and procedures of laboratory testing of civil engineering materials. Gain hands-on experience of laboratory testing of civil engineering materials. This course is taught in conjunction with CE A334 Properties of Materials.

Corequisites: CE A334.

CE A341 Environmental Engineering 3 Credits

Introduces fundamentals of environmental engineering, including theory and application of water and wastewater, solid waste and air quality engineering practice. Discusses natural processes that influence pollutant fate and use of these processes in engineered systems for pollution control.

Prerequisites: CHEM A106 with a minimum grade of C and CHEM A106L with a minimum grade of C and MATH A251 with a minimum grade of C.

CE A344 Water Resources Engineering 3 Credits

Provides a working knowledge of principles and procedures for planning and design of systems for management of water resources.

Prerequisites: ES A341 with a minimum grade of C and ES A341L with a minimum grade of C.

CE A351 Structural Analysis 3 Credits

Introduces techniques for the analysis of statically determinate and indeterminate structures to include beams, trusses and frames. Reviews internal force resultants, shear and moment diagrams, deflections, internal stresses. Discusses indeterminate analysis of structures, including methods of consistent deflections and slope-deflection. Provides an introduction to matrix methods.

Prerequisites: CE A334 with a minimum grade of C and ES A331 with a minimum grade of C.

CE A402 Transportation Engineering 3 Credits

Introduction to planning and engineering of transportation systems and their functions, components, and operation. Those systems include highways, airports, railroads, and water transportation with emphasis for highways on planning, geometrical design, traffic operations, and design of pavement structures.

Prerequisites: CE A435 with a minimum grade of C.

CE A403 Arctic Engineering 3 Credits

Introduces students to a broad spectrum of engineering challenges unique to cold regions. Discusses physical principles and practical data collection methods, analyses, designs and construction methods. Students gain a working knowledge of cold regions engineering problems and modern solutions as a basis for more detailed study.

CE A410 Foundation Engineering 3 Credits

Reviews slope stability analysis. Introduces bearing capacity of soils and effects of settlements on structure. Discusses design of footings and rafts, pile and pier foundations, retaining walls and anchored bulkheads, and foundations in frozen soils. Addresses construction problems in foundation engineering.

Prerequisites: CE A310 with a minimum grade of C.

CE A414 Soil Strength and Slope Stability 3 Credits

Advanced knowledge of soil shear strength properties; analysis of slope stability, including seismic stability and design of slope stabilization; case histories study and applications to cold regions engineering problems.

Registration Restrictions: Senior in civil engineering or instructor permission.

May Be Stacked With: CE A614

Prerequisites: CE A435 with a minimum grade of C.

CE A420 Fundamentals of Transportation Engineering 3 Credits

Introduces multi-modal transportation systems, including highways, airports, railroads and water transportation. Discusses factors that influence planning, design and operation of these systems. Emphasizes highway systems.

Prerequisites: ES A210 with a minimum grade of C and GEO A155 with a minimum grade of C.

CE A421 Design of Highways 3 Credits

Discusses fundamental aspects of transportation engineering in the design of highway systems. Addresses the design of geometric elements of streets and highways with the focus on safety, efficiency and pavement design. Topical areas include roadway functional classification, traffic controls, vertical and horizontal alignments, cross-section, interchanges, and intersections.

Prerequisites: CE A310 with a minimum grade of C and CE A420 with a minimum grade of C.

CE A423 Traffic Engineering 3 Credits

Traffic engineering studies and analyses, traffic flow theory, traffic control systems design, signalization, and capacity analyses.

May Be Stacked With: CE A623

Prerequisites: CE A402 with a minimum grade of C.

CE A424 Pavement Design 3 Credits

Analysis and design of highway and airport pavements, principles of theoretical and practical approaches for the design of flexible and rigid pavement structures. Methods for asphalt concrete mixture design and performance measures.

May Be Stacked With: CE A624

Prerequisites: CE A334 with a minimum grade of C and ES A331 with a minimum grade of C.

CE A425 Highway Engineering 3 Credits

Geometrical and structural design, construction, and maintenance of highway facilities and associated economic, social, and environmental consequences.

May Be Stacked With: CE A625

Prerequisites: CE A402 with a minimum grade of C.

CE A426 Traffic Modeling and Simulation 3 Credits

Introduces concepts of traffic flow simulation, modeling of driver behavior and application of traffic simulation in Intelligent Transportation Systems (ITS).

Registration Restrictions: Instructor permission

May Be Stacked With: CE A626

Prerequisites: CE A405 with a minimum grade of C and ES A302 with a minimum grade of C.

CE A432 Steel Design 3 Credits

Introduces structural design philosophies and current practices related to steel design. Utilizes the American Institute of Steel Construction (AISC) specification to discuss the design of basic structural elements in steel including tension members, fasteners, welds, column buckling, beam behavior, beam-columns and composite floor systems.

Prerequisites: CE A351 with a minimum grade of C.

CE A433 Reinforced Concrete Design 3 Credits

Essentials of structural design in reinforced concrete including building code requirements and standard practice for the design of basic structural elements.

Prerequisites: CE A431 with a minimum grade of C.

CE A437 Project Planning 1 Credit

Introduces the basics in civil engineering project planning and analysis. Defines problem statement and develops goals, objectives; generates alternatives and criteria for evaluation and implementation of civil engineering projects.

Registration Restrictions: Senior standing in Civil Engineering.

CE A438 Design of Civil Engineering Systems 3 Credits

Integrative capstone course for civil engineering students to collaborate in multidisciplinary teams to design a complex civil engineering system that meets client needs while protecting public health and safety. Students apply knowledge and skills learned in their undergraduate curriculum.

Registration Restrictions: Senior standing

Prerequisites: CE A344 or CE A405 or CE A422 or CE A432 or CE A433 or CE A442.

Attributes: UAA Integrative Capstone GER.

CE A442 Environmental Systems Design 3 Credits

Design of systems commonly used in environmental engineering practice with an emphasis on water and wastewater treatment. Design of unit processes and operations will be performed for both potable water and wastewater treatment. Selection of system components, design and performance calculations and complete engineering reports are required.

Prerequisites: CE A441 with a minimum grade of C and ES A341 with a minimum grade of C.

CE A445 Chemical and Physical Water and Wastewater Treatment Processes 3 Credits

The theory and design of chemical and physical unit processes utilized in the treatment of water and wastewater. Advanced theory of common unit processes including sedimentation, floatation, precipitation, disinfection, filtration and aeration will be explored in association with current peer-reviewed literature. Appropriate design considerations will be evaluated.

May Be Stacked With: CE A645

Prerequisites: CE A442 with a minimum grade of C.

CE A446 Biological Treatment Processes 3 Credits

Theory and design of aerobic and anaerobic process for the treatment of wastewater including activated sludge, various surface film reactors, sludge digestion and disposal, and nutrient removal.

May Be Stacked With: CE A646

Prerequisites: CE A442 with a minimum grade of C.

CE A447 Advanced Unit Processes 3 Credits

The theory and design of advanced unit processes with emphasis on emerging disinfectants, ozone and ultraviolet light disinfection, advanced oxidation, sorbents, and membranes; application of these innovative technologies in the drinking water and wastewater arena.

May Be Stacked With: CE A647

Prerequisites: CE A442 with a minimum grade of C or CE A445 with a minimum grade of C.

CE A451 Advanced Structural Analysis 3 Credits

Introduction of the Direct Stiffness Method (Matrix Analysis Method) with computer solutions for two-dimensional and three-dimensional linear-elastic frame and truss structures. Topics include shear deformations, elastic supports and connections, support settlements, thermal loads, and energy formulations of force-displacement relationships.

Registration Restrictions: MATH A314 is recommended

May Be Stacked With: CE A651

Prerequisites: CE A431 with a minimum grade of C.

CE A454 Timber Design 3 Credits

Essentials of structural design in timber including building code requirements and standard practice for the design of basic structural elements, connections and shearwall lateral force resisting systems.

May Be Stacked With: CE A654

Prerequisites: CE A431 with a minimum grade of C.

CE A461 Hydraulic Analysis and Design 3 Credits

This course presents analysis and design techniques for hydraulic facilities including water storage, conveyance, and pumping systems. Industry-standard computer software for hydraulic design will also be introduced.

Prerequisites: ES A341 with a minimum grade of C.

CE A462 Surface Water Dynamics 3 Credits

Open channel flow theory including: steady and unsteady flow, water surface profiles and the impact of hydraulic structures; sediment transport under open channel flow.

May Be Stacked With: CE A662

Prerequisites: ES A341 with a minimum grade of C.

CE A464 Hydrologic Analysis and Design 3 Credits

Presents fundamental concepts of hydrologic cycle, including precipitation, snow cover, evaporation, and groundwater hydraulics. Explains techniques of statistical hydrology and the usage of simulation models. The design of simple hydraulic structures will also be introduced.

Prerequisites: ES A341 with a minimum grade of C.

CE A475 Design of Ports and Harbors 3 Credits

Introduction to planning and design of port and harbor facilities.

Registration Restrictions: Senior standing in BS Civil Engineering program.

May Be Stacked With: CE A675

Prerequisites: ES A341 with a minimum grade of C.

CE A476 Coastal Engineering 3 Credits

Application of linear and nonlinear wave theory to the study of coastal processes and the design of coastal structures; wave transformation processes including wind generation, refraction and diffraction.

May Be Stacked With: CE A676

Prerequisites: ES A341 with a minimum grade of C.

CE A479 Sediment Transport and Coastal Processes 3 Credits

Investigation of sediment transport and coastal processes on beaches and in riverine/estuarine environments. Study of underlying hydrodynamic principles and engineering practices that are used to understand and solve sediment transport and coastal problems.

May Be Stacked With: CE A679

Prerequisites: ES A341 with a minimum grade of C.

CE A494O Highway Capacity Manual 3 Credits

Highway capacity analysis for preliminary planning, geometrical design and current operational capacity of roadway transportation facilities.

May Be Stacked With: CE A694O

Prerequisites: CE A405 with a minimum grade of C.

CE A610 Engineering Seismology 3 Credits

Covers internal structure of the earth, causes and occurrence of earthquakes, seismic waves and their propagation, seismograms, strong ground motion measurements, accelerometers and seismic network, data processing and interpretation of strong motion records, estimation of ground motion parameters and spatial variability, probabilistic and deterministic seismic hazard assessment with special reference to Alaska.

Registration Restrictions: Graduate level or undergraduate senior standing, or instructor permission.

Prerequisites: CE A435 with a minimum grade of C.

CE A611 Geotechnical Earthquake Engineering 3 Credits

Covers earthquakes and seismology, strong ground motion measurement, seismic hazard analysis, ground response analysis, dynamic soil properties, liquefaction, soil-structure interaction, seismic slope stability, and seismic design of retaining structures, with applications to cold regions geotechnical earthquake engineering problems.

Registration Restrictions: Graduate level or undergraduate senior standing, or instructor approval.

Prerequisites: CE A435 with a minimum grade of C.

CE A612 Advanced Foundation Design 3 Credits

Presents the analysis, design, and construction aspects of deep foundations and other special topics of deep foundations related to cold regions engineering. Specifically, this course will cover lateral earth pressures, lateral support systems, single pile and pile group behavior under vertical and lateral loads, including static and dynamic loading conditions, and the latest development in soil improvement and ground modification techniques. Special foundation engineering issues related to cold regions will also be discussed.

Registration Restrictions: Undergraduate civil engineering senior, graduate standing in engineering, or instructor permission.

Prerequisites: CE A422 with a minimum grade of C.

CE A614 Soil Strength and Slope Stability 3 Credits

Advanced knowledge of soil shear strength properties; analysis of slope stability, including seismic stability and design of slope stabilization; case histories study and applications to cold regions engineering problems.

Registration Restrictions: Graduate standing or instructor permission.

May Be Stacked With: CE A414

Prerequisites: CE A435 with a minimum grade of C.

CE A623 Traffic Engineering 3 Credits

Traffic engineering studies and analyses, traffic flow theory, traffic control systems design, signalization, and capacity analyses.

May Be Stacked With: CE A423

Prerequisites: CE A402 with a minimum grade of C.

CE A624 Pavement Design 3 Credits

Analysis and design of highway and airport pavements, principles of theoretical and practical approaches for the design of flexible and rigid pavement structures. Methods for asphalt concrete mixture design and performance measures.

Registration Restrictions: Graduate standing

May Be Stacked With: CE A424

Prerequisites: CE A334 with a minimum grade of C and ES A331 with a minimum grade of C.

CE A625 Highway Engineering 3 Credits

Geometrical and structural design, construction, and maintenance of highway facilities and associated economic, social, and environmental consequences.

Registration Restrictions: Civil engineering major

May Be Stacked With: CE A425

Prerequisites: CE A402 with a minimum grade of C.

CE A626 Traffic Modeling and Simulation 3 Credits

Introduces concepts of traffic flow simulation, modeling of driver behavior, and application of traffic simulation in Intelligent Transportation Systems (ITS).

Registration Restrictions: Instructor's permission and graduate standing

May Be Stacked With: CE A426

CE A627 Advanced Traffic Flow Theory 3 Credits

The course presents the different theories of traffic flow, statistical distributions of traffic flow parameters, traffic stream models, various car-following models, and traffic flow models for intersections. The class also presents the methods to analyze traffic performance using shock waves and queuing analysis.

Registration Restrictions: Instructor's permission or graduate standing

CE A631 Structural Finite Elements 3 Credits

Fundamental equations for different finite elements as well as computer modeling of engineering structures using these elements are examined. Basic finite elements for truss, beam, frame and triangular plane elements are discussed in detail. The use of finite element software to solve a variety of structural engineering problems is discussed. The results of actual analysis are critically examined in class.

Prerequisites: CE A431 with a minimum grade of C.

CE A633 Structural Dynamics 3 Credits

Introduces the theory of structural dynamics, including single and multiple-degree-of-freedom systems subjected to earthquake and other dynamic excitations, with emphasis on application to analysis and design of civil engineering structures.

Prerequisites: CE A431 with a minimum grade of C and MATH A302 with a minimum grade of C.

CE A634 Structural Earthquake Engineering 3 Credits

Introduces basic seismic concepts and design principles. Criteria for design and construction of structure subject to earthquake ground motions. Also includes technology for reducing earthquake loads through seismic isolation.

Registration Restrictions: Graduate level or undergraduate senior standing, or instructor approval.

Prerequisites: CE A431 with a minimum grade of C and CE A633 with a minimum grade of C.

CE A637 Earthquake Resistant Structural Design 3 Credits

Covers the special structural detail requirements for earthquake design in steel, concrete, timber, and masonry.

Registration Restrictions: Graduate level or undergraduate senior standing, or instructor approval.

Prerequisites: CE A431 with a minimum grade of C and CE A432 with a minimum grade of C and CE A433 with a minimum grade of C.

CE A639 Loads on Structures 3 Credits

Covers the computation of loads on structures using ASCE 7, Minimum Design Loads for Buildings and Other Structures. The computation of loads (dead, live, soil, flood, snow, wind, and seismic) and probable combinations of loads will be covered.

Registration Restrictions: Graduate level or undergraduate senior standing, or instructor approval.

Prerequisites: CE A431 with a minimum grade of C and CE A435 with a minimum grade of C.

CE A641 Fundamentals of Environmental Engineering and Applied Environmental Science 3 Credits

Introduction to the fundamental theory, analysis and regulations of environmental engineering and applied environmental science. Topics include environmental chemistry, drinking water and wastewater treatment, air pollution and solid waste management.

Registration Restrictions: Graduate standing in Civil Engineering or enrolled in AEST.

May Be Stacked With: CE A441

CE A645 Chemical and Physical Water and Wastewater Treatment Processes 3 Credits

The theory and design of chemical and physical unit processes utilized in the treatment of water and wastewater. Advanced theory of common unit processes including sedimentation, floatation, precipitation, disinfection, filtration and aeration will be explored in association with current peer-reviewed literature. Appropriate design considerations will be evaluated.

Registration Restrictions: Graduate standing in Civil Engineering or instructor permission.

May Be Stacked With: CE A445

CE A646 Biological Treatment Processes 3 Credits

Theory and design of aerobic and anaerobic process for the treatment of wastewater including activated sludge, various surface film reactors, sludge digestion and disposal, and nutrient removal.

Registration Restrictions: Graduate standing in Civil Engineering or Applied Environmental Science and Technology.

May Be Stacked With: CE A446

CE A647 Advanced Unit Processes 3 Credits

The theory and design of advanced unit processes with emphasis on emerging disinfectants, ozone and ultraviolet light disinfection, advanced oxidation, sorbents, and membranes; application of these innovative technologies in the drinking water and wastewater arena.

Registration Restrictions: Graduate standing in Civil Engineering or instructor permission.

May Be Stacked With: CE A447

CE A651 Advanced Structural Analysis 3 Credits

Introduction of the Direct Stiffness Method (Matrix Analysis Method) with computer solutions for two-dimensional and three-dimensional linear-elastic frame and truss structures. Topics include shear deformations, elastic supports and connections, support settlements, thermal loads, and energy formulations of force-displacement relationships.

Registration Restrictions: Graduate standing or instructor approval.

May Be Stacked With: CE A451

CE A652 Advanced Steel Design 3 Credits

Advanced structural design in steel, including building code requirements and standard practice for the design of steel structures and connections.

Registration Restrictions: Graduate standing or instructor approval.

CE A653 Advanced Reinforced Concrete Design 3 Credits

Provides advanced instruction in the design of reinforced concrete structural elements. Topics include deep beams, slender columns, shear walls and two-way slabs. Provides an introduction to the principles and standards of practice for the design of pre-stressed concrete members.

Registration Restrictions: Graduate standing or instructor permission. Students should have previously completed a course on the design of reinforced concrete structures and also have a working knowledge of the ACI 318 standard of practice.

CE A654 Timber Design 3 Credits

Essentials of structural design in timber including building code requirements and standard practice for the design of basic structural elements, connections and shearwall lateral force resisting systems.

May Be Stacked With: CE A454

Registration Restrictions: Graduate standing in CE or permission of instructor.

CE A662 Surface Water Dynamics 3 Credits

Open channel flow theory including: steady and unsteady flow, water surface profiles and the impact of hydraulic structures; sediment transport under open channel flow.

Registration Restrictions: Graduate standing in Civil Engineering

May Be Stacked With: CE A462

Prerequisites: ES A341 with a minimum grade of C.

CE A663 Ground Water Dynamics 3 Credits

Fundamentals of geohydrology, hydraulics of flow through porous media, well hydraulics, ground water pollution, and ground water resources development.

Prerequisites: ES A341.

CE A674 Waves, Tides, and Ocean Processes for Engineers 3 Credits

Introduction to the physical properties and behavior of sea water with the ocean basins, and the practice of ocean research and engineering. Introduction to the physical properties and behavior of free surface gravity waves, measurements and characterizations of ocean wave climate, and interactions of ocean waves with structures and natural coastal features.

Registration Restrictions: Prerequisite and graduate standing, or instructor permission.

Prerequisites: ES A341.

CE A675 Design of Ports and Harbors 3 Credits

Introduction to planning and design of port and harbor facilities.

Registration Restrictions: Graduate standing in Engineering or instructor permission.

May Be Stacked With: CE A475

Prerequisites: ES A341 with a minimum grade of C.

CE A676 Coastal Engineering 3 Credits

Application of linear and nonlinear wave theory to the study of coastal processes and the design of coastal structures; wave transformation processes including wind generation, refraction and diffraction.

Registration Restrictions: Graduate standing in Civil Engineering

May Be Stacked With: CE A476

Prerequisites: ES A341 with a minimum grade of C.

CE A677 Coastal Measurements and Analysis 3 Credits

Review of and practice with modern instrumentation, equipment, sampling and measurement techniques, and methods of analysis for quantitative study of coastal ocean physical processes.

Registration Restrictions: Upper class or graduate standing in Geomatics, Engineering, or Natural Sciences.

CE A678 Design of Ocean Engineering Systems 3 Credits

Introduction to planning, design, construction, operation and maintenance of engineering works in the ocean.

Registration Restrictions: School of Engineering graduate standing or instructor permission.

Prerequisites: CE A674.

CE A679 Sediment Transport and Coastal Processes 3 Credits

Investigation of sediment transport and coastal processes on beaches and in riverine/estuarine environments. Study of underlying hydrodynamic principles and engineering practices that are used to understand and solve sediment transport and coastal problems.

Registration Restrictions: Graduate standing in civil engineering or instructor permission.

May Be Stacked With: CE A479

CE A686 Civil Engineering Project 3 Credits

Civil and Arctic Engineering project arranged among the advisor, graduate advisory committee and student to solve a practical engineering problem.

Registration Restrictions: Graduate standing with a minimum of 9 graduate credits.

CE A690 Selected Topics in Civil Engineering 3 Credits

Study of selected topics in Civil Engineering.

Special Note: May be repeated once for credit with a different topic.

Registration Restrictions: Graduate standing or instructor permission.

CE A6940 Highway Capacity Manual 3 Credits

Highway capacity analysis for preliminary planning, geometrical design and current operational capacity of roadway transportation facilities.

CE A698 Individual Research 1-9 Credits

A course to be designed between the student and faculty member to allow students the chance to pursue advanced research interests in engineering at the MS level.

Registration Restrictions: Graduate standing and instructor permission

CE A699 Thesis 1-9 Credits

Individual study of an advanced engineering problem resulting in a thesis.

Registration Restrictions: Graduate standing and instructor approval

Communication (COMM)

Courses

COMM A101 Introduction to Human Communication 3 Credits

Introduces basic perspectives, methods, and theories about human communication in personal and professional contexts. Topics include: conflict, gender, interpersonal relationships, listening, organizational communication, persuasion, rhetoric, and small group dynamics.

COMM A111 Fundamentals of Oral Communication 3 Credits

Survey of communication principles, theories, and skills including interpersonal communication, small group communication, and public speaking. Students develop oral communication skills through practice in a variety of individual activities, group activities, and individual and group presentations.

Special Note: Students who qualify for placement in WRTG A111 or have already completed WRTG A111 are qualified for this course.

Registration Restrictions: Appropriate test score on English placement test, SAT Verbal Section, or ACT English Test will waive the ENGL A109 or WRTG A110 prerequisite.

Prerequisites: ENGL A109 with a minimum grade of C or WRTG A110 with a minimum grade of C or WRTG A111 or WRTG A211 or WRTG A212 or WRTG A213 or WRTG A214 or (Accuplacer-Reading Comp with a score of 080 and Accuplacer-Sentence Skills with a score of 090) or Accuplacer-Sum AASS + AARC with a score of 170 or (Accuplacer NG Writing with a score of 265 and Accuplacer NG Reading with a score of 265) or Enhanced ACT English with a score of 22 or Original ACT English with a score of 22 or ACT English with a score of 22 or SAT Critical Reading Score with a score of 560 or SAT Verbal Score with a score of 560 or SAT Verbal with a score of 560 or (COMPASS E-Write (1-12 scale) with a score of 10 and COMPASS Reading Skills with a score of 75).

Attributes: UAA Oral Communication GER.

COMM A235 Small Group Communication 3 Credits

Study of theories and skills related to small group communication. Emphasis is on the communicative skills involved in group relationships and group decision making processes in both professional and personal contexts. Students develop oral communication skills by engaging in practice in a variety of individual exercises and presentations, and group presentations.

Special Note: Students who qualify for placement in WRTG A111 or have already completed WRTG A111 are qualified for this course.

Registration Restrictions: Appropriate test score on English placement test, SAT Verbal Section, or ACT English Test will waive the ENGL A109 or WRTG A110 prerequisite.

Prerequisites: ENGL A109 with a minimum grade of C or WRTG A110 with a minimum grade of C or WRTG A111 or WRTG A211 or WRTG A212 or WRTG A213 or WRTG A214 or (Accuplacer-Reading Comp with a score of 080 and Accuplacer-Sentence Skills with a score of 090) or Accuplacer-Sum AASS + AARC with a score of 170 or (Accuplacer NG Writing with a score of 265 and Accuplacer NG Reading with a score of 265) or Enhanced ACT English with a score of 22 or Original ACT English with a score of 22 or ACT English with a score of 22 or SAT Critical Reading Score with a score of 560 or SAT Verbal Score with a score of 560 or SAT Verbal with a score of 560 or (COMPASS E-Write (1-12 scale) with a score of 10 and COMPASS Reading Skills with a score of 75).

Attributes: UAA Oral Communication GER.

COMM A236 Interviewing 3 Credits

Examines theories and individual responsibilities in information gathering, employment and persuasive interviews. Students practice face-to-face verbal and nonverbal communication through role-played interviews.

Prerequisites: COMM A111 or COMM A235 or COMM A237 or COMM A241.

COMM A237 Interpersonal Communication 3 Credits

Study of theories and skills related to dyadic communication and the variables which affect it, including conflict, culture, gender, and rules in both personal and professional contexts. Students will develop oral communication skills designed to improve communication in relationships by engaging in a variety of individual exercises, individual presentations, and group activities.

Special Note: Students who qualify for placement in WRTG A111 or have already completed WRTG A111 are qualified for this course.

Registration Restrictions: Appropriate test score on English placement test, SAT Verbal Section, or ACT English Test will waive the ENGL A109 or WRTG A110 prerequisite.

Prerequisites: ENGL A109 with a minimum grade of C or WRTG A110 with a minimum grade of C or WRTG A111 or WRTG A211 or WRTG A212 or WRTG A213 or WRTG A214 or (Accuplacer-Reading Comp with a score of 080 and Accuplacer-Sentence Skills with a score of 090) or Accuplacer-Sum AASS + AARC with a score of 170 or (Accuplacer NG Writing with a score of 265 and Accuplacer NG Reading with a score of 265) or Enhanced ACT English with a score of 22 or Original ACT English with a score of 22 or ACT English with a score of 22 or SAT Critical Reading Score with a score of 560 or SAT Verbal Score with a score of 560 or SAT Verbal with a score of 560 or (COMPASS E-Write (1-12 scale) with a score of 10 and COMPASS Reading Skills with a score of 75).

Attributes: UAA Oral Communication GER.

COMM A241 Public Speaking 3 Credits

Study of theories and skills applicable to informative, persuasive, and special occasion platform speaking. Emphasis on effective selection, organization, and presentation of material to diverse audiences across diverse settings. Students will develop oral communication skills by engaging in a variety of exercises and individual presentations.

Special Note: Students who qualify for placement in WRTG A111 or have already completed WRTG A111 are qualified for this course.

Registration Restrictions: Appropriate test score on English placement test, SAT Verbal Section, or ACT English Test will waive the ENGL A109 or WRTG A110 prerequisite.

Prerequisites: ENGL A109 with a minimum grade of C or WRTG A110 with a minimum grade of C or WRTG A111 or WRTG A211 or WRTG A212 or WRTG A213 or WRTG A214 or (Accuplacer-Reading Comp with a score of 080 and Accuplacer-Sentence Skills with a score of 090) or Accuplacer-Sum AASS + AARC with a score of 170 or (Accuplacer NG Writing with a score of 265 and Accuplacer NG Reading with a score of 265) or Enhanced ACT English with a score of 22 or Original ACT English with a score of 22 or ACT English with a score of 22 or SAT Critical Reading Score with a score of 560 or SAT Verbal Score with a score of 560 or SAT Verbal with a score of 560 or (COMPASS E-Write (1-12 scale) with a score of 10 and COMPASS Reading Skills with a score of 75).

Attributes: UAA Oral Communication GER.

COMM A305 Intercultural Communication 3 Credits

Examines the process of interpersonal communication when the effects of cultural differences create dissimilar interpretations and expectations for interpersonal interaction. Explores theories and experiences of communication in intercultural relationships.

Prerequisites: COMM A101 or COMM A111 or COMM A235 or COMM A237.

COMM A320 Argumentation and Debate **3 Credits**

An introduction to debating as a practical application of argumentation theory. A review of argumentation theory serves as the foundation for skill development in inventing, researching, phrasing and articulating arguments in the context of academic debating.

Prerequisites: COMM A111 or COMM A241.

COMM A340 Nonverbal Communication **3 Credits**

Covers theoretical and research literature pertinent to nonverbal communication behavior. Focuses on the pervasive role that movement plays in the formal and informal communication process.

Prerequisites: COMM A111 or COMM A235 or COMM A237 or COMM A241.

COMM A341 Advanced Public Speaking **3 Credits**

Provides students with an opportunity to develop excellence in advocacy and public address. Builds on theories and skills relevant to informative, persuasive and special occasion speeches, and provides high level instruction in the use of visual aids. Prepares students to deliver well-organized, highly developed presentations in a polished, professional manner appropriate to the audience and occasion.

Prerequisites: COMM A111 or COMM A241.

COMM A345 Women and Communication **3 Credits**

Provides a historical, theoretical, and contemporary view of how communication, culture, and gender interact and create meaning. Includes an examination of the experience of women historically in interpersonal, professional, and political settings.

Prerequisites: COMM A101 or COMM A111 or COMM A235 or COMM A237 or COMM A241.

COMM A346 Oral Interpretation of Literature **3 Credits**

Theory and practice of the art of oral interpretation in order to stimulate an understanding of and responsiveness to prose, poetry and drama, and to develop the ability to convey to others, through oral reading, an appreciation of literature.

Prerequisites: COMM A111 or COMM A235 or COMM A237 or COMM A241.

COMM A360 Competitive Debating **3 Credits**

Study of the theory and practice of competitive academic debating. Students will consider competitive debating from the perspective of debater, adjudicator and competition organizer.

Special Note: May be repeated once for credit.

Registration Restrictions: Faculty permission.

Prerequisites: COMM A111 or COMM A241.

COMM A370 Relational Communication **3 Credits**

Study of communication processes in intimate personal relationships. Examines the role of communication in relationship engagement, relationship maintenance and relationship disengagement.

Prerequisites: COMM A101 or COMM A111 or COMM A235 or COMM A237.

COMM A380 Theories of Human Communication **3 Credits**

Study of major communication theories, principles, and research paradigms in interpersonal, group, organizational, and public contexts.

Prerequisites: COMM A111 or COMM A235 or COMM A237 or COMM A241.

COMM A390 Selected Topics in Communication **3 Credits**

Selected topics in communication arising from special circumstances of demand or faculty expertise. Specific titles as announced.

Special Note: May be repeated once for credit with a change of subtitle.

Prerequisites: COMM A111 or COMM A235 or COMM A237 or COMM A241.

COMM A410 Communication in Education **3 Credits**

Explores theories, research, symbolic activity and communication behavior at play in a range of teaching, training and learning environments. Considers the nature of personal, public, political and cultural discourse surrounding educational processes, issues and debates.

Prerequisites: COMM A111 or COMM A235 or COMM A237 or COMM A241.

COMM A412 Persuasion **3 Credits**

Explores history, modern theory, and practical application of persuasion theory. A review of current literature, examination of persuasion in interpersonal, organizational, political, and public contexts.

Prerequisites: COMM A101 or COMM A111 or COMM A235 or COMM A237 or COMM A241.

COMM A420 Family Communication **3 Credits**

Study of interpersonal communication processes in the family.

Examines the role of communication in family systems, roles, and decision-making; as well as the role of communication in power, conflict, and family stresses.

Prerequisites: COMM A101 or COMM A111 or COMM A235 or COMM A237 or COMM A241.

Community Education (CED)

Courses

CED A119 Community Awareness Workshop on Domestic Violence and Sexual Assault **4 Credits**

Introduces Women's Resource and Crisis Center services, domestic violence and sexual assault issues, and basic skills necessary for victim advocacy. Kenai Peninsula College

CED A133 Beginning Fly Fishing **1 Credit**

Introduces the basics of fly fishing, including selection of equipment, types of line, flies, and techniques geared toward local lakes and streams.

CED A157 The Art and History of Brewing **1 Credit**

Introduces the basic brewing process, the styles of beer, their historical and regional origins, and their presentation and pairing with food. Includes field trips to local breweries.

Registration Restrictions: Must be 21 or older to enroll.

CED A160 Appreciating Opera **1 Credit**

Introduces the major eras, composers and styles of opera.

CED A185 Presenting Art Lessons K-12 **1 Credit**

Provides guidelines and information for artists and community members who want to present art experiences in classroom settings. Includes effective classroom and materials management, and guidance for working with schools and teachers in residency type situations. Participants need prior familiarity with art concepts. This is not an art methods course.

Complex Systems (CPLX)

Courses

CPLX A200 Introduction to Complexity **3 Credits**

An introduction to the science of complexity, currently used to predict system behavior in the physical, life, and social sciences.

Crosslisted With: BIOL A200.

Prerequisites: MATH A121 or MATH A151.

Attributes: UAA Natural Sciences GER.

Computer & Networking Tech (CNT)

Courses

CNT A160 PC Operating Systems **3 Credits**

Develops basic understanding of command line, desktop, and server operating systems. Includes computer programming, architecture, and hardware necessary to understand the operating system interactions.

CNT A162 PC Architecture and Building **3 Credits**

Develops skills required to evaluate, install and troubleshoot software and hardware computer equipment. Introduces architecture and hardware associated with microcomputer operation, including, but not limited to, motherboards, CPUs, chipsets, memory, buses, expansion slots and resource allocations.

CNT A165 Customer Service Fundamentals **1 Credit**

Introduces basic customer service principles, including relationships, perceptions, telephone techniques, quality, ethics, record keeping, interpersonal relationships, and teamwork.

CNT A168 Computer User Support and Help Desk **3 Credits**

Overview of user support systems and help desk functions in an enterprise environment. Examines user support from the perspective of end users and develops skills for ethical customer services, critical thinking, troubleshooting and decision-making. Includes identifying typical problems and needs assessment for installation, training and documentation.

CNT A170 CCNA 1 **4 Credits**

This is the first of four Cisco Networking Academy courses covering the material for the Cisco Certified Networking Associate (CCNA) Routing and Switching certification. Covers networking fundamentals and develops basic skills in installing, addressing and troubleshooting local area networks.

Registration Restrictions: Appropriate score on reading placement test for placement into WRTG A111 is required.

CNT A180 PC Peripherals, Storage and A+ Certification **4 Credits**

Covers PC operating systems, peripheral devices, auxiliary storage devices and the interfaces used to connect them to the personal computer. Also covers the fundamental topics necessary to prepare for the CompTIA A+ Certification exams.

CNT A183 Local Area Networks **3 Credits**

Presents the fundamentals of Local Area Networking, including topologies, protocols, computer and delivery hardware, Ethernet, network operating systems, LAN assessment, and other related software. Covers the fundamental networking topics necessary to prepare for the CompTIA Net+ Exam.

Prerequisites: CNT A160 and CNT A162.

CNT A210 PC Technician Fundamentals **3 Credits**

Introduction to the principles of personal computer hardware/software maintenance and troubleshooting. The course is designed to give the student equivalent experience of a PC technician that has been working for six months.

Prerequisites: CIS A105.

CNT A212 Network Technician Fundamentals **3 Credits**

Introduces the principles of developing, installing, maintaining and troubleshooting Peer-to-Peer, Local Area, and Wide Area Networks. Designed to serve the needs of advanced computer end-users interested in mastering broad, vendor-independent networking concepts. Provides students with the knowledge and experience required to pass the CompTIA Network + exam.

Prerequisites: CNT A210.

CNT A240 Industry PC Configuration Essentials **2 Credits**

Introduces personal computer configuration essentials. Includes installation, configuration and support of personal computers in a mixed enterprise environment.

Prerequisites: CNT A170 with a minimum grade of C or CNT A183 with a minimum grade of C or CNT A212 with a minimum grade of C.

CNT A241 Administering and Supporting Industry Network Infrastructure **3 Credits**

Provides an introduction to network infrastructure in a mixed enterprise environment.

Prerequisites: CNT A240 with a minimum grade of C.

CNT A242 Industry Network Directory Configuration **3 Credits**

Provides an introduction for installing, configuring and deploying application services in an enterprise- networked environment.

Prerequisites: CNT A241 with a minimum grade of C.

CNT A243 Industry Application Infrastructure **3 Credits**

Provides an introduction for application support and deployment in an enterprise-networked environment.

Prerequisites: CNT A241 with a minimum grade of C or CNT A242 with a minimum grade of C.

CNT A261 CCNA 2 4 Credits

This is the second of four Cisco Networking Academy courses covering the material for the Cisco Certified Networking Associate (CCNA) Routing and Switching certification. Covers the architecture, components, operations, configuration, and troubleshooting of routers and switches in a small network.

Registration Restrictions: Students may enroll concurrently with CNT A170 when offered in half-semester format, but must meet prerequisite grade in CNT A170 when CNT A261 begins.

Prerequisites: CNT A170 with a minimum grade of C or concurrent enrollment.

CNT A262 Computer Technical Support 2 Credits

Develops skills necessary for evaluating and implementing various technical support functions, including hardware and software needs assessments, training development, preventive maintenance, and effective communication and documentation.

Prerequisites: CNT A165.

CNT A264 Introduction to Information Security 3 Credits

Provides students with an understanding of the core concepts that relate to the practice of network security. This course will help prepare students for the CompTIA Security+ exam.

Prerequisites: CNT A212 or CNT A261.

CNT A270 CCNA 3 4 Credits

This is the third of four Cisco Networking Academy courses covering the material for the Cisco Certified Networking Associate (CCNA) Routing and Switching certification. Covers the architecture, components, operations, configuration and troubleshooting of routers and switches in a larger, more complex network.

Prerequisites: CNT A261 with a minimum grade of C.

CNT A271 CCNA 4 4 Credits

This is the fourth of four Cisco Networking Academy courses covering the material for the Cisco Certified Networking Associate (CCNA) Routing and Switching certification. Discusses, configures and troubleshoots the WAN technologies and network services required by converged applications in a complex network.

Registration Restrictions: Students may enroll concurrently with CNT A270 when offered in half-semester format, but must meet prerequisite grade in CNT A270 when CNT A271 begins.

Prerequisites: CNT A270 with a minimum grade of C or concurrent enrollment.

CNT A275 Information Technology Project Management 2 Credits

Introduces information technology project management fundamentals. Develops skills required to work with stakeholders and information technology processes. Develops skills in leadership and team participation. Includes IT project planning, design, team skills, proposals, implementation, reporting and completion.

Registration Restrictions: Satisfactory completion of 12 CNT credit hours with a minimum grade of C.

Prerequisites: WRTG A212 with a minimum grade of C.

CNT A276 Individual Technical Project 1-3 Credits

Covers development, implementation and completion of a project based on a relevant technological issue. Student works closely with faculty to produce and end product and report.

Special Note: Faculty permission and working knowledge of CNT topics required.

Prerequisites: CNT A261.

CNT A280 Server Operating Systems 3 Credits

Develops server operating system basics. Includes installation, troubleshooting, creation and administration of user accounts and resources, and remote and internet accounts.

Special Note: A CompTIA Network + Certificate may be substituted for the CNT A183 or CNT A212 prerequisite, with department approval.

Prerequisites: CNT A261 and (CNT A183 or CNT A212).

CNT A282 Industry Workplace Experience 1-3 Credits

Provides supervised workplace experience in industry settings. Integrates advanced-level knowledge and practice to demonstrate skill competencies.

Special Note: Requires instructor permission and successful completion of 12 credits in the CNT program.

Registration Restrictions: Faculty permission.

CNT A290 Selected Topics in Information Technology 1-4 Credits

Covers various intermediate to advanced topics in information technology.

Special Note: Prerequisites vary by topic. May be repeated with a change in subtitle.

CNT A390 Selected Topics in Computer and Networking Technology 1-4 Credits

Offers selected topics in computers and networking pertaining to state-of-the-art technology and trends. Course content is determined by current trends, new technologies, and student and employer needs.

Special Note: Prerequisites vary by topic. May be repeated with a change in subtitle.

Computer Info & Office Systems (CIOS)

Courses**CIOS A082 Clerical Accounting 3 Credits**

Introduces accounting fundamentals using a service business to illustrate the basic accounting equation, closing the books, and preparing financial statements.

Special Note: Offered as Demand Warrants.

CIOS A101 Keyboarding 3 Credits

Introduces keyboarding skills and emphasizes correct techniques and development of speed, accuracy, and proofreading. Introduces word processing concepts to produce personal and business letters, tables, and reports.

Special Note: Credit will not be counted for both CIOS A101 and (CIOS A101A and CIOS A101B and CIOS A101C).

CIOS A101A Keyboarding A: Basic Keyboarding 1 Credit

Introduces the keyboard alphabet, number, and symbol keys. Emphasizes techniques and mechanics of keyboarding by touch.

Special Note: Credit will not be counted for both CIOS A101 and (CIOS A101A and CIOS A101B and CIOS A101C).

CIOS A101B Keyboarding B: Business Documents I 1 Credit

Introduces keyboarding format for basic business correspondence, reports and tables using a word processing program. Continues to develop keyboarding speed, accuracy and proofreading.

Special Note: Credit will not be counted for both CIOS A101 and (CIOS A101A and CIOS A101B and CIOS A101C).

Registration Restrictions: CIOS A101A or 30 net WPM keyboarding skills recommended

CIOS A101C Keyboarding C: Business Documents II 1 Credit

Builds on concepts introduced in CIOS A101B to create intermediate correspondence, resumes, reports and tables in a word processing program and continues to develop keyboarding speed and accuracy.

Special Note: Credit will not be counted for both CIOS A101 and (CIOS A101A and CIOS A101B and CIOS A101C).

Prerequisites: CIOS A101B with a minimum grade of C.

CIOS A102 Keyboarding Skill Building 1 Credit

Emphasizes development of keyboarding speed and accuracy.

Special Note: May be repeated with only 1 credit in each semester.

Prerequisites: CIOS A101A.

CIOS A103 Introduction to Personal Computers 1 Credit

Introduces personal computers to novice users. Includes basics of start-up and using the mouse to perform Windows operations.

CIOS A108 Digital Design Fundamentals 1 Credit

Introduces design fundamentals as they apply to using desktop publishing, image editing, and web design applications to communicate through online or print media.

Prerequisites: CIOS A113 and CIOS A130A.

CIOS A113 Operating Systems: MS Windows 1 Credit

Introduces currently supported versions of operating systems. Includes file and disk management, the control panel, desktop, utilities, windows setup, and maintenance.

CIOS A115 10-Key for Business Calculations 2 Credits

Introduces the 10-key touch control method to solve business-related calculations while developing speed and accuracy.

CIOS A116 Business Calculations 3 Credits

Introduces business calculations and use of calculators by touch to solve problems in bank records, payroll, trade and cash discounts, mark-up and markdown, interest, consumer credit, depreciation, inventory, financial statements, insurance, and taxes.

Prerequisites: MATH A054 with a minimum grade of C or ASSET Numerical Skills with a score of 43.

CIOS A118 Payroll Procedures 2 Credits

Introduces payroll procedures including calculating various types of payroll, keeping payroll records, federal laws, and reporting procedures.

CIOS A120A Bookkeeping Software Applications I: QuickBooks 1 Credit

Introduces the QuickBooks accounting program. Covers basic bookkeeping procedures for company setup and maintenance, data input for check register, accounts receivable, accounts payable, banking, and sales tax.

Special Note: Knowledge of bookkeeping principles is recommended.

Prerequisites: CIOS A101A and CIOS A113.

CIOS A125A Electronic Communications I: MS Outlook 1 Credit

Introduces electronic communication and time management features of Microsoft Outlook.

CIOS A130A Word Processing I: MS Word 1 Credit

Introduces fundamentals, concepts and applications of word processing. Students learn basic commands needed to create, format, edit and print documents.

Registration Restrictions: Basic keyboarding skills of 20 WPM recommended

CIOS A135A Spreadsheets I: MS Excel 1 Credit

Introduces the fundamentals of spreadsheet design and use, including basic commands, formulas, and functions. Covers insertion of charts, objects and hyperlinks.

Registration Restrictions: Basic keyboarding skills and file management knowledge recommended

CIOS A140A Databases I: MS Access 1 Credit

Introduces the fundamentals of creating a relational database including tables, queries, forms and reports.

Registration Restrictions: Basic keyboarding and file management skills recommended

CIOS A146 Internet Concepts and Applications 1 Credit

Introduces Internet concepts, tools and applications. Includes use of electronic mail; search strategies for research, academic and personal use; studies security and ethics issues; and new Internet technologies.

Registration Restrictions: Basic keyboarding and file management skills recommended

CIOS A150A Presentations: MS PowerPoint 1 Credit

Introduces software and design techniques for creating professional presentations that include a variety of effects such as transition, animation, sound and graphics.

Registration Restrictions: Basic keyboarding and file management skills recommended

CIOS A152A Digital Imaging Concepts and Applications: Photoshop 3 Credits

Introduces the fundamentals, concepts, and applications of digital imaging techniques, including basic digital design fundamentals, enhancing images, and creating images for use in print or on the web.

Prerequisites: CIOS A108 or concurrent enrollment and CIOS A130A or concurrent enrollment and CIOS A146 or concurrent enrollment.

CIOS A153A Website Design: HTML 1 Credit

Introduces designing web pages and documents using Hypertext Markup Language (HTML). Emphasizes sound design principles and the use of CSS for formatting and layout.

Prerequisites: CIOS A146.

CiOS A153B Website Design: Dreamweaver 3 Credits

Introduces fundamentals of web design using the Dreamweaver application. Emphasizes sound design principles and the use of CSS for formatting and layout.

Prerequisites: CIOS A130A and CIOS A146 and CIOS A152A or concurrent enrollment.

CiOS A154A Desktop Publishing I: PageMaker 1 Credit

Introduces fundamentals and concepts of desktop publishing and design elements used to create a variety of documents for publication, including flyers, brochures, and newsletters.

Prerequisites: CIOS A101A.

CiOS A154B Desktop Publishing I: MS Publisher 1 Credit

Introduces fundamentals and concepts of desktop publishing and design elements used to create a variety of documents for publication, including flyers, brochures, and newsletters.

Special Note: Students are strongly encouraged to complete CIOS A254B to gain a fuller understanding of this topic.

Prerequisites: CIOS A101A.

CiOS A161A Business Writing Strategies 2 Credits

Introduces proofreading techniques used in business communication. Develops skills in proofreading documents for content, usage, grammar, punctuation, spelling and format.

Registration Restrictions: Proof of placement into WRTG A111 and keyboarding skills of 30 net words per minute or higher.

CiOS A162A Shorthand 3 Credits

Introduces an alphabetic shorthand system designed for fast note taking or dictation.

Prerequisites: CIOS A101A.

CiOS A164 Filing 1 Credit

Introduces filing terminology, techniques, and ARMA (American Records Management Association) filing rules as they apply to alphabetic, numeric, subject, and geographic filing systems.

CiOS A165 Office Procedures 3 Credits

Introduces the duties and responsibilities of office employees in the following areas: mail, records management, office communications, reprographics, travel, meetings, conferences and employment procedures.

Registration Restrictions: Basic keyboarding, word processing and file management skills recommended

CiOS A190 Selected Topics in Office Technology 1-3 Credits

Covers various topics in office technology. Course content is determined by specific student or industry needs.

Special Note: Prerequisites will vary with topic.

CiOS A201A Document Processing 3 Credits

Applies keyboarding and word processing skills to letters, mail merges, tabulations, reports, business forms, and other office documents while building speed and accuracy.

Prerequisites: CIOS A101.

CiOS A207 Machine Transcription 1 Credit

Applies word processing and proofreading skills to create quality documents using transcription equipment. Designed for students with no previous transcription experience.

Prerequisites: (CIOS A101B or CIOS A101C) and CIOS A161A.

CiOS A208 Medical Transcription 3 Credits

Applies word processing and proofreading skills to machine transcription of medical dictation to produce accurate, quality documents. Designed for students with no previous transcription experience. Students will learn needed medical terminology.

Prerequisites: (CIOS A101B or CIOS A101C) and CIOS A161A.

CiOS A220A Bookkeeping Software Applications II: QuickBooks 2 Credits

Applies skills learned in CIOS A120A to more advanced applications of creating financial reports, period-end procedures, payroll, inventory, jobs and time tracking, accounting issues, and integration with other software.

Prerequisites: CIOS A120A.

CiOS A230A Word Processing II: MS Word 1 Credit

Covers skills necessary to create and edit business documents such as letters, memos, reports, basic tables and charts, outlines, mail merges, and column text. Examines sharing work using comments, revisions and merging.

Registration Restrictions: Keyboarding skills of 30 net WPM and basic Microsoft Word skills recommended

CiOS A235A Spreadsheets II: MS Excel 1 Credit

Presents concepts and techniques for using Excel to solve problems and make decisions. Topics include financial functions; multiple worksheets and workbooks; creating, sorting and querying a table; and templates.

Registration Restrictions: CIOS A135A recommended

CiOS A240A Databases II: MS Access 2 Credits

Presents concepts and techniques for using Access databases to solve problems and make decisions. Includes advanced features of queries, forms, filters, relationships, and integration with other applications.

Prerequisites: CIOS A140A.

CiOS A241 Integrated Applications 3 Credits

Applies the powerful integration capabilities of word processing, spreadsheet, database, and other applications, including the World Wide Web. Builds skill in application integration through a variety of projects that include using critical thinking, work organization, time management, and teamwork skills.

Prerequisites: CIOS A230A and CIOS A235A and CIOS A240A.

CiOS A251A Desktop Publishing Concepts and Applications: InDesign 3 Credits

Presents fundamental digital design techniques and the utilization of desktop publishing software to generate professional publications.

Prerequisites: CIOS A108 or concurrent enrollment and CIOS A130A or concurrent enrollment.

CiOS A254B Desktop Publishing II: MS Publisher 2 Credits

Applies skills learned in CIOS A154B to more advanced desktop publishing concepts and techniques. Presents design techniques and the use of desktop publishing software to generate sophisticated publications. Topics include scanning, graphic formats, typography, and integration with other applications.

Prerequisites: CIOS A154B.

CiOS A255 Multimedia Applications 3 Credits

Applies computer skills to learn how to manipulate sound, digital video, and digital photography to create a multimedia presentation.

Prerequisites: CIOS A130A and CIOS A135A and CIOS A150A.

CIOS A259 Preparing Electronic Documents: Adobe Acrobat **1 Credit**
Covers publishing documents in portable document format, and designing and creating forms and documents that can be emailed, uploaded, and accessed on the World Wide Web, placed on intranet file systems, or permanently stored on various media storage devices.

Prerequisites: CIOS A130A and CIOS A146 or concurrent enrollment.

CIOS A260A Business Communications **3 Credits**

Applies communication principles to creating business messages that involve problem solving and human relations issues. Topics include communication foundations, the writing process, workplace correspondence and communicating both personally and digitally.

Registration Restrictions: Keyboarding and word processing skills, knowledge of document formats, or instructor permission.

Prerequisites: WRTG A111 with a minimum grade of C.

CIOS A261A Interpersonal Skills in Organizations **3 Credits**

Examines theories and practices of human behavior in the workplace. Emphasizes leadership theory, problems in communication and motivation, and interpersonal skills that enhance the ability to function successfully with others in an organization.

Prerequisites: CIOS A165.

CIOS A262A Job Search Strategies **2 Credits**

Examines how to assess personal talents and career goals to develop appropriate cover letters, resumes and portfolios. Emphasizes job search techniques, preparation for successful interviews and job success.

Registration Restrictions: CIOS A165 recommended

CIOS A264A Records Management **2 Credits**

Builds on principles learned in CIOS A165 and applies them to management of information and records. Covers the field of records management, legal and ethical issues, and the controls and technology related to the creation, use, maintenance, protection, retrieval, and disposition of paper and electronic records.

Prerequisites: CIOS A165 with a minimum grade of C.

CIOS A265 Office Management **3 Credits**

Examines workplace trends, management techniques, communication, conflict resolution, ethics, diversity, technology, legal issues and the changing roles of the administrative professional.

Prerequisites: CIOS A165 with a minimum grade of C.

CIOS A276A Independent Project **1 Credit**

A culminating class for students to demonstrate their ability to use a suite of applications to meet office needs.

Special Note: Students work closely with faculty to produce an end product that utilizes at least three software applications to enhance workplace efficiency.

Registration Restrictions: Faculty permission and advanced knowledge of CIOS topics

CIOS A295 Office Internship **1 Credit**

Places students in business offices related to their educational program and occupational objectives for a minimum of 45 hours of on-the-job work experience.

Registration Restrictions: Minimum of 12 CIOS credits and instructor permission

Prerequisites: CIOS A165 with a minimum grade of C.

Computer Info Systems (CIS)

Courses

CIS A105 Introduction to Personal Computers and Application Software **3 Credits**

Introduction to computer literacy emphasizing basic hands-on use of personal computers, operating systems, and application software to include word processing, spreadsheets, databases, presentation graphics, and the Internet.

Registration Restrictions: Keyboarding skill of 30 wpm or better is recommended.

CIS A110 Computer Concepts in Business **3 Credits**

Introduces students to the use of popular productivity software, operating system software and computer hardware from a business perspective. Examines personal computer software packages, the information processing cycle and beginning programming concepts. Emphasizes solving business problems utilizing spreadsheet and database software applications.

Registration Restrictions: Recommended: MATH A105 and (CIS A105 or familiarity with personal computers, basic software applications and keyboarding of at least 30 wpm.)

CIS A210 Contemporary Business Applications Development **3 Credits**

Business application development using contemporary technologies and programming languages. Design of user interfaces and integration with other development platforms such as spreadsheets and databases.

Registration Restrictions: If prerequisite is not satisfied, approved UAA mathematics placement test score and current programming experience are required.

Prerequisites: CIS A110 with a minimum grade of C and (MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C).

CIS A250 Basic Web Page Development for Business Applications **3 Credits**

Focuses on fundamentals of designing and developing web pages for business applications using the most recent versions of Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS). Includes concepts related to best practices for managing design processes, selecting service providers, prototyping, testing and accessibility compliance.

Special Note: Students may apply no more than 3 credits from CIS A250 or CIS A350 toward graduation requirements.

May Be Stacked With: CIS A350

CIS A280 Managerial Communications 3 Credits

Focuses on improving writing, presentation, and teamwork skills within a managerial environment. Emphasizes the development of professional communication strategies based on audience analysis techniques.

Lab sessions provide practical, hands-on exercises with emphasis on collaborative report writing and managerial presentations.

Registration Restrictions: BBA students with a catalog year earlier than 2010-2011 must take CIS A305 Managerial Presentations in lieu of CIS A280.

Prerequisites: CIS A110 with a minimum grade of C or concurrent enrollment and (COMM A111 with a minimum grade of C or concurrent enrollment or COMM A241 with a minimum grade of C or concurrent enrollment) and WRTG A212 with a minimum grade of C or concurrent enrollment.

CIS A295 Computer Programming Internship 1-6 Credits

Computer programming and/or end-user support work to include maintenance of information equipment, networks, and software experience in a faculty-approved position.

Special Note: Requires 75 hours of work experience for each credit. May be repeated once for credit. Maximum of 3 internship credits may be used to meet degree requirements.

Registration Restrictions: Department permission required. Student must be in good standing in the College of Business and Public Policy. Cumulative GPA of 2.75 or higher.

Prerequisites: CIS A210 with a minimum grade of C.

CIS A305 Managerial Presentations 3 Credits

Focuses on quality managerial communications in a business environment. Uses computer software to create and refine presentation visuals and written assignments. Course strategies and organizational plans for composing business communications; for creating attractive documents and visuals; and how to effectively use projected visuals in oral presentations.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing. BBA students with a catalog year earlier than 2010-11 must take CIS A305 in lieu of CIS A280.

Prerequisites: CIS A110 with a minimum grade of C and WRTG A212 with a minimum grade of C.

CIS A310 Analysis of Business Systems 3 Credits

Presents an overview of systems analysis concepts and computer-based tools for use in the analysis of business information systems. Directed toward the development of communication skills needed for determining business system requirements and conveying those requirements to developers and system stakeholders. Concepts and tools will be applied to community-based, student-led projects.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing. AAS Business Computer Information Systems students may register with instructor approval.

Prerequisites: CIS A210 with a minimum grade of C and CIS A305 with a minimum grade of C.

CIS A330 Database Management Systems 3 Credits

Covers principles of database management systems, including relational database concepts, design, and application, methods of file organization, query languages, and online transaction processing systems. Students will design and implement a database project during the semester.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: CIS A210 with a minimum grade of C.

CIS A345 Managing Data Communications and Computer Networks 3 Credits

Introduces the rapidly changing environment of data communications over local area networks and over switched and private voice lines. Focuses on the control and management of data in a distributed environment, the technology issues associated with data communications, and current trends in the industry.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: CIS A110 with a minimum grade of C.

CIS A350 Advanced Web Page Development for Business Applications 3 Credits

Focuses on advanced features of designing and developing web pages for business applications using the most recent versions of Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS). Includes concepts related to best practices for managing design processes, selecting service providers, prototyping, testing and accessibility compliance. Also includes basic client-side programming for web pages using current scripting techniques such as JavaScript and jQuery.

Special Note: Students may apply no more than 3 credits from CIS A250 or CIS A350 toward graduation requirements.

May Be Stacked With: CIS A250

Prerequisites: CIS A210 with a minimum grade of C or CS A109 with a minimum grade of C or CS A110 with a minimum grade of C or CS A111 with a minimum grade of C or CSCE A201 with a minimum grade of C or CSE A205 with a minimum grade of C.

CIS A361 Advanced Contemporary Business Applications Development 3 Credits

Develops business applications using contemporary technologies and programming languages at an advanced level. Designs user interfaces and integrates them with other platforms such as spreadsheets and databases.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: CIS A210 with a minimum grade of C.

CIS A376 Management Information Systems 3 Credits

Focuses on developing understanding of the role of Information Systems (IS) to achieve business goals and objectives. Emphasizes developing students' skills to become informed participants in the formation and implementation of IS requirements.

Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses and junior standing. BBA students must be admitted to upper-division standing.

Prerequisites: CIS A280 with a minimum grade of C or CIS A305 with a minimum grade of C or COMM A241 with a minimum grade of C.

Attributes: UAA Integrative Capstone GER.

CIS A390 Selected Topics in Management Information Systems 1-6 Credits

Study of specific current issues, techniques, and trends in Management Information Systems (MIS).

Special Note: May be repeated for a maximum of 9 credits with a change of subtitle. Maximum of 9 elective credits may be used for the BBA MIS degree.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: CIS A210 with a minimum grade of C.

CIS A395 Programmer/Analyst Internship 3 Credits

Computer programmer/analyst work experience in a faculty approved position.

Special Note: Requires 75 hours of work experience for each credit. May be taken more than once up to a maximum of 6 credits. Maximum of 3 internship credits may be used to meet degree requirements.

Registration Restrictions: Department permission required. Student must be in good standing in the College of Business and Public Policy. Cumulative GPA of 2.75 or higher.

Prerequisites: CIS A210 with a minimum grade of C.

CIS A410 Project Management 3 Credits

Essentials of planning, scheduling, and managing information system projects; risk assessment and risk management; and project management tools. Involves students in the development of a project plan for a community-based information system development project.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: CIS A310 with a minimum grade of C and CIS A330 with a minimum grade of C and CIS A376 with a minimum grade of C.

CIS A430 Client-Server Programming for Business Applications 3 Credits

Covers basic client-server system concepts and business application development using client-server development tools. Students will write advanced business application programs using client-server design and development tools with programming languages in order to interface with Database Management System (DBMS) software for interactive processing. Emphasis on application development, program design, program testing, and certification in the client-server environment.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: CIS A210 with a minimum grade of C and CIS A330 with a minimum grade of C and CIS A376 with a minimum grade of C.

CIS A445 Advanced Network Management 3 Credits

Provides practical knowledge about the installation, configuration, administration, and operation of networks in local area and wide area settings. The operation and interconnectivity between commercially available software will be explored as well as the utilization of different communication protocols on the same network.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: CIS A345.

CIS A460 Web Development in the .Net Environment 3 Credits

Development of data-driven web applications within the .Net environment. Uses ASP.Net and C# as the development environment.

Special Note: Assumes previous programming experience with HTML and CSS.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: CIS A210 with a minimum grade of C and (CIS A250 with a minimum grade of C or CIS A350 with a minimum grade of C or JPC A345 with a minimum grade of C) and CIS A376 with a minimum grade of C.

CIS A470 Data Warehouses and Business Intelligence 3 Credits

Introduces students to the theory and practice of data warehouses for enterprises and business intelligence for enterprise resource planning (ERP) systems. Surveys processes of extraction, cleansing, consolidation and transformation of heterogeneous data into a single enterprise data warehouse. Reviews how business intelligence can be derived from data warehouses.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

May Be Stacked With: CIS A670

CIS A489 Systems Design, Development and Implementation 3 Credits

Engages students in the design, development and implementation of an information system project. Students working in small teams integrate and apply MIS concepts and skills, conduct independent research, develop an implementable system for a community organization, and present written and oral reports.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: CIS A376 with a minimum grade of C and CIS A410 with a minimum grade of C and (CIS A430 with a minimum grade of C or CIS A460 with a minimum grade of C).

CIS A490 Advanced Topics in Management Information Systems 3 Credits

Study of advanced current issues, techniques and trends in management information systems (MIS). Students will be required to conduct research.

Special Note: May be repeated with a change of subtitle/topic. Maximum of 9 elective credits may be used for the BBA MIS degree. Check course schedule for specific titles being offered.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: CIS A210 with a minimum grade of C.

CIS A495 Systems Analyst/User Support Internship 3 Credits

Systems analyst or user-support work experience in a faculty approved position.

Special Note: Requires 75 hours of work experience for each credit. May be taken more than once up to a maximum of 6 credits. Maximum of 3 internship credits may be used to meet degree requirements.

Registration Restrictions: Department permission required. Student must be in good standing in the College of Business and Public Policy. Cumulative GPA of 2.75 or higher.

Prerequisites: CIS A210 with a minimum grade of C and CIS A376 with a minimum grade of C.

CIS A498 Individual Research Project 1-6 Credits

In a simulated professional environment, students complete an MIS project, prepare a project report, and make a managerial presentation.

Special Note: May be taken more than once for credit. Maximum of 3 credits may be used to meet degree requirements.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: CIS A361 with a minimum grade of C and CIS A376 with a minimum grade of C.

CIS A670 Data Warehouse and Business Intelligence 3 Credits

Provides strategic knowledge and insight into the theory and design of data warehouses for enterprises and business intelligence for enterprise resource planning (ERP) systems. Analyzes processes of extraction, cleansing, consolidation and transformation of heterogeneous data into a single enterprise data warehouse. Students research how business intelligence can be derived from data warehouses.

Registration Restrictions: Graduate standing

May Be Stacked With: CIS A470

CIS A692 Management Information Systems Seminar 3 Credits

Analysis of current and future implications of information systems (IS) and emerging technologies for managers and decision makers. Focuses on the interaction of technology with business organizations including e-commerce, enterprise IS, and globalization issues.

Registration Restrictions: Graduate standing

Computer Sci & Computer Eng (CSCE)

Courses

CSCE A201 Computer Programming I 4 Credits

Introduces object-oriented computer programming techniques and problem solving. Covers basic syntax; sequential, branching, and iterative execution; objects, methods, inheritance, polymorphism, and encapsulation; arrays and linked lists; and recursion.

Registration Restrictions: Students must register concurrently for lab section.

Prerequisites: MATH A105 with a minimum grade of C or concurrent enrollment or MATH A151 with a minimum grade of C or concurrent enrollment or MATH A152 with a minimum grade of C or concurrent enrollment or MATH A155 with a minimum grade of C or concurrent enrollment or MATH A251 with a minimum grade of C or concurrent enrollment or MATH A252 with a minimum grade of C or concurrent enrollment or MATH A253 with a minimum grade of C or concurrent enrollment.

Corequisites: CSCE A201L.

CSCE A211 Computer Programming II 4 Credits

Covers object-oriented programming in C++ including real-world applications built using objects, classes, inheritance, hierarchies, polymorphism, recursion, event processing and exception handling.

Registration Restrictions: Students must concurrently register for lab section.

Prerequisites: CSCE A201 with a minimum grade of C.

Corequisites: CSCE A211L.

CSCE A222 Object-Oriented Programming I 3 Credits

In-depth coverage of object-oriented programming in the Java programming language. Topics include inheritance, abstraction, interfaces, references, polymorphism, dynamic binding, class hierarchies, container classes, random access file input/output (I/O), serializability, graphical applications, event handling, Unified Modeling Language (UML) and object-oriented design.

Prerequisites: CSCE A201 with a minimum grade of C.

CSCE A241 Computer Hardware Concepts 4 Credits

Analysis and design of electronic devices used as building blocks for construction of simple combinational and sequential digital systems. Presents formats for data storage, number systems and alphanumeric codes, and methods of implementing logical and arithmetic operations within computers. Relates hardware components' capabilities and limitations to design requirements for computer processing, memory and control functions.

Registration Restrictions: Students must register concurrently for lab section.

Crosslisted With: EE A241

Prerequisites: CSCE A201 with a minimum grade of C or CSE A205 with a minimum grade of C.

Corequisites: CSCE A241L.

CSCE A248 Computer Organization and Assembly Language Programming 3 Credits

Organization and operation of a computer's processor, including registers, memory, input/output (I/O) and control. Assembly language programming with emphasis placed on hardware/software interface and computer design.

Prerequisites: (CSCE A211 with a minimum grade of C or CSE A205 with a minimum grade of C) and (CSCE A241 with a minimum grade of C or EE A241 with a minimum grade of C).

CSCE A302 Object-Oriented Programming II 3 Credits

Introduces design patterns as solutions to recurring problems in developing object-oriented software. Includes a detailed examination of significant design patterns and selected programming projects in a current object-oriented language. Introduces object-oriented programming concepts such as threading and pointer-based file input/output.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Prerequisites: CSCE A222 with a minimum grade of C.

CSCE A305 Android Programming 3 Credits

Covers Android development concepts and programming. Topics include development environments, design issues, interface and input/output (I/O), code development, and publication.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Prerequisites: CSCE A222 with a minimum grade of C.

CSCE A311 Data Structures and Algorithms 3 Credits

Representation and organization of digital information in the form of effective and efficient data structures, manipulation of data structures in a procedural fashion, and the analysis and evaluation of various algorithms. The following topics will be covered: Abstract Data Types (ADT), arrays, tables, linked lists, stacks, queues, trees, sorting, searching, graphs, hashing, spanning trees, disjoint sets, and heaps.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Prerequisites: CSCE A211 with a minimum grade of C and MATH A261 with a minimum grade of C.

CSCE A321 Operating Systems 3 Credits

An introductory course on operating systems. Topics covered include all aspects of resource management and abstraction required to support application programs including: basic security, processes and threads, processor scheduling, synchronization, memory management, virtual memory, virtual machines, device drivers and Input/Output (I/O), and file systems.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Prerequisites: CSCE A248 with a minimum grade of C and CSCE A311 with a minimum grade of C.

CSCE A331 Programming Language Concepts 3 Credits

Study of the theoretical foundations needed to design and implement modern programming languages, including syntax, type systems, semantics, and memory structures. Comparison of several programming languages in different paradigms such as procedural, functional, logic, and scripting languages. Programming assignments will be given in each language studied.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Prerequisites: CSCE A248 with a minimum grade of C and CSCE A311 with a minimum grade of C.

CSCE A342 Digital Circuits Design 3 Credits

Digital system design using integrated circuits and field-programmable gate arrays (FPGAs). Design and discussion of data path and control units, finite state machines, and timing analysis. Digital circuit simulation and electronic schematic creation.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Prerequisites: CSCE A241 with a minimum grade of C or EE A241 with a minimum grade of C.

CSCE A351 Automata, Algorithms and Complexity 3 Credits

Study of the theory of computing and algorithm analysis and design. Topics include context-free grammars and parsing, finite automata and regular languages, pushdown automata and context-free grammars, deterministic and nondeterministic Turing machines, decidability and computability. In the algorithm domain, the course provides an introduction to analysis and complexity of algorithms, searching/sorting algorithms, mathematical algorithms, and graph theoretic algorithms. Introduction to complexity theory.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Prerequisites: CSCE A311 with a minimum grade of C and MATH A261 with a minimum grade of C.

CSCE A360 Database Systems 3 Credits

Application of data modeling, relational database concepts and design, normalization theory, and structured query language. Study of underlying data structures and implementations of data processing architectures.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Prerequisites: CSCE A211 with a minimum grade of C or CSCE A222 with a minimum grade of C.

CSCE A365 Computer Networks 3 Credits

Introduces network architectures, layered protocols, Internet protocols and network service interfaces. Emphasis is on design and implementation of networking hardware, including routers, bridges, switches, hubs and repeaters. Covers local networks, addressing, routing, flow control, queuing, routing protocols and packet loss.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Prerequisites: CSCE A311 with a minimum grade of C and (STAT A253 with a minimum grade of C or STAT A307 with a minimum grade of C).

CSCE A381 Computer Graphics 3 Credits

Creation of computer-generated images on programmable 3-D graphics hardware. Color, lighting, textures, hidden surfaces, 3-D geometric transformations, curve and surface representations, 2-D and 3-D user interfaces, and the visual modeling of physical phenomena.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Prerequisites: CSCE A311 with a minimum grade of C and MATH A252 with a minimum grade of C.

CSCE A395 Internship in Computing 3 Credits

Application of computer science or computer engineering skills in a professional work setting.

Special Note: May be taken up to three times, but only 3 credits may be applied toward CS or CSE major requirements.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Prerequisites: CSCE A211 with a minimum grade of C.

CSCE A401 Software Engineering 3 Credits

Extends the ideas of software design and development from the introductory programming sequence to encompass the problems encountered in large-scale programs. Topics include software lifecycle models for developing large systems, advanced issues in object-oriented programming, design patterns, software development tools, project management principles and principles of interface design.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Prerequisites: CSCE A311 with a minimum grade of C.

CSCE A405 Artificial Intelligence 3 Credits

Introduces the basic concepts of artificial intelligence (AI). Topics include intelligent agents; heuristics, local and adversarial search; first-order logic and knowledge of representation and machine learning.

Special Note: Not available for credit to students who have completed CSCE A605.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

May Be Stacked With: CSCE A605

Prerequisites: CSCE A311 with a minimum grade of C.

CSCE A412 Evolutionary Computing 3 Credits

Introduces students to subjects in the broad field of evolutionary computing, including genetic algorithms, evolution strategies, evolutionary programming and genetic programming. Emphasis will be on the design, implementation, testing, debugging and verification of correct programs.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Special Note: Not available for credit to students who have completed CSCE A612.

May Be Stacked With: CSCE A612

Prerequisites: CSCE A311 with a minimum grade of C.

CSCE A415 Machine Learning 3 Credits

In-depth survey of basic and advanced concepts of machine learning. Topics include linear discrimination; supervised, unsupervised and semi-supervised learning; multilayer perceptrons; maximum-margin methods; Monte Carlo methods; and reinforcement learning.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Special Note: Not available for credit to students who have completed CSCE A615.

May Be Stacked With: CSCE A615

Prerequisites: CSCE A311 with a minimum grade of C and (STAT A253 with a minimum grade of C or STAT A307 with a minimum grade of C).

CSCE A431 Compilers 3 Credits

Programming language translation from a high-level object-oriented language to assembly code. Lexical analysis, semantic analysis and code generation. Finite state automata, flow graphs, directed graphs, parsers, parse trees and regular expressions. Includes optimizations to improve runtime efficiency.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Special Note: Not available for credit to students who have completed CSCE A631.

May Be Stacked With: CSCE A631

Prerequisites: CSCE A248 with a minimum grade of C and (CSCE A331 with a minimum grade of C or CSCE A351 with a minimum grade of C).

CSCE A442 VLSI Circuit Design 3 Credits

Analysis and design of digital very large scale integration (VLSI) circuits including area restrictions, delay minimization and power minimization. Simulation of VLSI logic in software. Complementary metal-oxide semiconductor (CMOS) design rules, physical design, power consumption, clocking strategies and transistor theory. Engineering VLSI simulation project at the end of the course.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Prerequisites: CSCE A342 with a minimum grade of C and EE A204 with a minimum grade of C.

CSCE A445 Computer Design and Simulation 4 Credits

Advanced study through simulation of computer organization including processor, memory and input/output (I/O) system organization. Key elements include memory hierarchy and caching, computer arithmetic, instruction sets, addressing, interrupts, processor pipelines, I/O interconnection, and memory management including demand paging and translation lookaside buffer (TLB) cache. Students learn metrics used to measure system performance and evaluate engineering tradeoffs made in design.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Prerequisites: CSCE A248 with a minimum grade of C and CSCE A311 with a minimum grade of C.

CSCE A446 Digital Media and Interactive Systems 3 Credits

Covers digital media systems for digital cinema and digital cable/Internet media creation, delivery, and interactive systems. Topics covered include digital audio and video encoding and decoding, transport, multiplexing, broadband and baseband transmission, real-time requirements, and interactive on-demand systems for video and video games. Also covers the historical progressions of audio and video from traditional analog to digital formats, including cable; web/mobile Internet Protocol television (IPTV) and media; Advanced Television Systems Committee (ATSC) standards; over-the-air, interactive on-demand digital video; and digital video gaming.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Special Note: Not available for credit to students who have completed CSCE A646.

May Be Stacked With: CSCE A646

Prerequisites: CSCE A321 with a minimum grade of C and CSCE A365 with a minimum grade of C.

CSCE A448 Computer Architecture 3 Credits

A quantitative approach to computer architecture and parallelism, which addresses both the software and hardware aspects of parallelism in modern computing systems. Specific emphasis will be placed on instruction-level, thread-level, data-level, task-level and request-level parallelism, and developing parallel application code in assembler and high-level languages for systems such as graphics processing units (GPUs).

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Prerequisites: CSCE A248 with a minimum grade of C.

CSCE A450 Mobile Robotics 3 Credits

Introduces robotics with embedded systems. Controlling mobile robots, sensors and motors with autonomous and user-controlled operations. Different types of robots, including aerial, underwater and automotive robots. Real-time image processing and neural networks including genetic algorithms will be covered.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Special Note: Not available for credit to students who have completed CSCE A650.

May Be Stacked With: CSCE A650

Prerequisites: (CSCE A241 with a minimum grade of C or EE A241 with a minimum grade of C) and CSCE A311 with a minimum grade of C and CSCE A365 with a minimum grade of C.

CSCE A460 Database Systems II 3 Credits

In-depth treatment of relational theory, non-relational database models, transaction processing, concurrency control and administration of databases in practice. Course includes an applied project of significant scope.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Special Note: Not available for credit to students who have completed CSCE A660.

May Be Stacked With: CSCE A660

Prerequisites: CSCE A360 with a minimum grade of C.

CSCE A462 Data Mining 3 Credits

Survey and application of techniques for classification, clustering and association rule mining. Covers rule-based, tree-based, statistical and regression approaches.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Special Note: Not available for credit to students who have completed CSCE A662.

May Be Stacked With: CSCE A662

Prerequisites: CSCE A360 with a minimum grade of C.

CSCE A465 Computer and Network Security 3 Credits

Analyzes computer software and network vulnerabilities, as well as security mechanisms to detect and defend against system attacks, such as authentication, access control and cryptography. Includes vulnerabilities introduced in programming, web development, network protocol design, operating systems and databases. Legal and ethical issues concerning privacy, intellectual property and computer crime will be discussed in the context of case studies.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Special Note: Not available for credit to students who have completed CSCE A665.

May Be Stacked With: CSCE A665

Prerequisites: CSCE A365 with a minimum grade of C.

CSCE A470 Computer Science and Engineering Capstone Project 3 Credits

Application of computer science and computer engineering concepts, principles and practices to develop a research, applied software development, or computer engineering project. The student will analyze, design, document, implement and deliver a presentation and written report of a research project or software/hardware system of moderate complexity under the supervision of the instructor and/or other faculty. Includes a discussion of ethical, professional and contemporary issues in technology and the impact of computing technology in a global and societal context.

Registration Restrictions: Senior standing, completion of GER Tier 1 (basic college-level skills) courses, admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Prerequisites: CSCE A365 with a minimum grade of C and WRTG A212 with a minimum grade of C and ((CSCE A351 with a minimum grade of C and CSCE A401 with a minimum grade of C) or (CSCE A311 with a minimum grade of C and CSCE A342 with a minimum grade of C and CSCE A448 with a minimum grade of C)) and PHIL A305 with a minimum grade of C or concurrent enrollment.

Attributes: UAA Integrative Capstone GER.

CSCE A485 Computer and Machine Vision 3 Credits

Introduces computer vision and machine vision. Topics covered include differences between computer and machine vision, image capture and processing, filtering, thresholding, edge detection, shape analysis, shape detection, pattern matching, digital image stabilization, stereo ranging, 3D models from images, real-time vision systems, and recognition of targets. Applications include inspection, surveillance, search and rescue, and machine vision navigation.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Special Note: Not available for credit to students who have completed CSCE A685.

May Be Stacked With: CSCE A685

Prerequisites: (PHYS A124 with a minimum grade of C or PHYS A212 with a minimum grade of C) and CSCE A321 with a minimum grade of C.

CSCE A490 Topics in Computer Science and Computer Systems Engineering 3 Credits

Advanced topics in computer science or computer systems engineering not taught in other CSCE course offerings.

Special Note: May be repeated for credit with change of subtitle. Not available for credit to students who have completed CSCE A690 with same subtitle.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

May Be Stacked With: CSCE A690

CSCE A495 Computing Internship Project 3 Credits

Application of computer science or computer engineering skills in a professional work setting. The student will analyze, design, develop and document a realistic computing project of moderate complexity under the supervision of a qualified professional who has agreed in advance to undertake this role.

Registration Restrictions: Admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

Special Note: May be taken up to three times, but only 3 credits may be applied toward CS or CSE major requirements. Registration Restrictions: Instructor approval

Prerequisites: CSCE A311 with a minimum grade of C.

CSCE A498 Individual Research 1-3 Credits

Students will engage in an independent research project under the supervision of a faculty member. The result will be a paper or presentation prepared to publication standards.

Special Note: May be repeated up to a maximum of 6 credits.

Registration Restrictions: Upper-division standing, admission to BS Computer Science, BS Computer Systems Engineering, or BS Electrical Engineering, or instructor approval

CSCE A601 Advanced Software Engineering 3 Credits

Coverage of current methodologies used to develop large software systems. Topics include requirements, specification, design, implementation, testing, project management, formal methods, maintenance and evolution. Seminar discussion of classic and current research articles in software engineering.

Registration Restrictions: Graduate standing

CSCE A605 Advanced Artificial Intelligence 3 Credits

Analysis, design and implementation of intelligent systems utilizing heuristics, local and adversarial search, first-order logic, knowledge representation techniques, and machine learning algorithms. Students will review published artificial intelligence research, write a research paper, and present research findings in a public forum.

Special Note: Not available for credit to students who have completed CSCE A405.

Registration Restrictions: Graduate standing

May Be Stacked With: CSCE A405

CSCE A612 Advanced Evolutionary Computing 3 Credits

Broad coverage of the field of evolutionary computing, including genetic algorithms, evolution strategies, evolutionary programming and genetic programming. Emphasis will be on the design, implementation, testing, debugging and verification of correct programs. Graduate students will be required to complete a literature review of recent research in evolutionary computation, write the results of that review in a research summary paper and complete a presentation of these findings in a public forum.

Special Note: Not available for credit to students who have completed CSCE A412.

Registration Restrictions: Graduate standing

May Be Stacked With: CSCE A412

CSCE A615 Advanced Machine Learning 3 Credits

Topics include linear discrimination; supervised, unsupervised and semi-supervised learning; multilayer perceptron; maximum-margin methods; Monte Carlo simulation; and reinforcement learning. Students are required to implement a research project that applies machine learning technique(s) to a unique and original data set, or to develop a technique that combines or modifies one or more machine learning algorithms.

Special Note: Not available for credit to students who have completed CSCE A415.

Registration Restrictions: Graduate standing

May Be Stacked With: CSCE A415

CSCE A621 Mission Critical Systems 3 Credits

Covers the timing correctness of hardware and software, including rate-monotonic analysis for software and design for fault recovery methods for hardware and software sanity monitoring. Topics include microprocessor-based predictable response and embedded systems that require the integration of sensor and actuator devices, analog to digital and digital to analog interfaces, single and multicore microprocessors, a real-time operating system, and multitasking application software.

Registration Restrictions: Graduate standing

CSCE A631 Advanced Compilers 3 Credits

Programming language translation from a high-level object-oriented language to assembly code. Covers lexical analysis, semantic analysis, code generation, finite state automata, flow graphs, directed graphs, parsers, parse trees and regular expressions. Includes optimizations to improve runtime efficiency. Graduate students will be required to complete a literature review of recent research in compilers, write the results of that review in a research summary paper and complete a presentation of these findings in a public forum.

Special Note: Not available for credit to students who have completed CSCE A431.

Registration Restrictions: Graduate standing

May Be Stacked With: CSCE A431

CSCE A632 Advanced Programming Languages 3 Credits

Advanced topics in the design of programming languages, including abstract syntax, denotational semantics, operational semantics, type systems, run-time behavior, program analysis, garbage collection and compilation. Programs are written in multiple programming languages to study programming paradigms.

Registration Restrictions: Graduate standing

CSCE A646 Advanced Digital Media and Interactive Systems 3 Credits

Covers digital media systems for digital cinema and digital cable/Internet media creation, delivery, and interactive systems. Topics covered include digital audio and video encoding and decoding, transport, multiplexing, broadband and baseband transmission, real-time requirements, and interactive on-demand systems for video and video games. Students will be required to complete a literature review of recent research in digital media and interactive systems, write a research summary paper and complete a presentation in a public forum.

Special Note: Not available for credit to students who have completed CSCE A446.

Registration Restrictions: Graduate standing

May Be Stacked With: CSCE A446

CSCE A648 Advanced Computer Architecture 3 Credits

Advanced computer architecture of very large scale integration (VLSI) digital systems. Focus will be placed on basic VLSI technologies, design automation algorithms and techniques, computer-aided design tools, and design of complete integrated systems on a chip. The course includes a hands-on design project utilizing design automation software tools to implement a chip design, layout and simulation.

Registration Restrictions: Graduate standing

CSCE A650 Advanced Mobile Robotics 3 Credits

Introduction to robotics with embedded systems. Covers mobile robots, sensors, motors, and their control with autonomous and user-controlled operations in aerial, underwater and land environments. Applications of real-time image processing and neural networks will be covered. Students will be required to complete a literature review of recent research in robotics, write the results of that review in a research summary paper and complete a presentation of these findings in a public forum.

Special Note: Not available for credit to students who have completed CSCE A450.

Registration Restrictions: Graduate standing

May Be Stacked With: CSCE A450

CSCE A652 Advanced Computational Theory and Algorithms 3 Credits

Advanced study of the design and analysis of algorithms, computational theory and complexity theory. The focus is on models of computation, the theory of automata and formal languages. Topics include finite state machines, formal grammars, recursive function theory, pattern matching, linear programming, non-deterministic polynomial (NP) time problems and NP-complete problems.

Registration Restrictions: Graduate standing

CSCE A660 Advanced Database Systems 3 Credits

Comprehensive treatment of relational theory, non-relational database models, transaction processing, concurrency control and administration of databases in practice. Includes an applied project of significant scope, solving a database challenge for an outside client and formally presenting the results.

Special Note: Not available for credit to students who have completed CSCE A460.

Registration Restrictions: Graduate standing

May Be Stacked With: CSCE A460

CSCE A662 Advanced Data Mining 3 Credits

Survey and application of techniques for classification, clustering and association rule mining. Covers rule-based, tree-based, statistical and regression approaches. Project involving an original data set, including integration, formatting, conceptualization, hypothesis testing, analysis, evaluation and presentation of results.

Special Note: Not available for credit to students who have completed CSCE A462.

Registration Restrictions: Graduate standing

May Be Stacked With: CSCE A462

CSCE A665 Advanced Computer and Network Security 3 Credits

Analyzes computer software, network vulnerabilities and security mechanisms to detect and defend against system attacks. Discusses legal and ethical issues concerning privacy, intellectual property and computer crime. Students will be required to complete a research paper in computer and network security and complete a presentation of the research paper in a public forum.

Special Note: Not available for credit to students who have completed CSCE A465.

Registration Restrictions: Graduate standing

May Be Stacked With: CSCE A465

CSCE A667 Advanced Computer Network Systems 3 Credits

Covers network architectures, layered protocols, Internet protocols and network service interfaces. Emphasis on design and implementation of networking hardware, including routers, bridges, switches, hubs and repeaters. Local networks, addressing, routing, flow control, queuing, routing protocols and packet loss.

Registration Restrictions: Graduate standing

CSCE A671 Research Methods in Computer Science and Engineering 3 Credits

Covers skills and research methods utilized in computer science and engineering research, including empirical and theoretical research. Discusses the steps in conducting a literature review, writing research proposals and papers, writing a thesis, hypothesis testing, delivering a research presentation, and ethical conduct.

Registration Restrictions: Graduate standing

CSCE A685 Advanced Computer and Machine Vision 3 Credits

Topics covered include differences between computer and machine vision, image capture and processing, filtering, thresholding, edge detection, shape analysis, shape detection, pattern matching, digital image stabilization, stereo ranging, 3D models from images, real-time vision systems, and recognition of targets. Students will be required to complete a literature review of recent research in computer and machine vision, write a research summary paper, and complete a presentation of their work in a public forum.

Special Note: Not available for credit to students who have completed CSCE A485.

Registration Restrictions: Graduate standing

May Be Stacked With: CSCE A485

CSCE A690 Topics in Computer Science and Computer Systems Engineering 3 Credits

Examines advanced topics in computer science and computer science engineering. A research summary paper and research presentation is required.

Special Note: May be repeated for credit with change of subtitle. Not available for credit to students who have completed CSCE A490 with same subtitle.

Registration Restrictions: Graduate standing and instructor permission

May Be Stacked With: CSCE A490

CSCE A698 Individual Research 3 Credits

Students will engage in independent research projects under the supervision of a faculty member. The result will be a research paper prepared to publication standards with the goal of submission for publication in a refereed journal or conference.

Special Note: May be repeated for a maximum of 6 credits.

Registration Restrictions: Graduate standing and instructor permission

CSCE A699 Thesis 1-6 Credits

Independent research conducted under the supervision of a thesis committee. Students must investigate a state-of-the-art computer engineering or computer science research topic, write a detailed proposal, identify a thesis advisor, obtain the advisor's approval to conduct the proposed research, complete the research and write a thesis that is approved by the committee.

Special Note: A maximum of 6 credits may be applied toward degree requirements for the MS in Computer Engineering and Computer Science.

Registration Restrictions: Admission to the MS in Computer Engineering and Computer Science program and permission of thesis advisor.

Computer Science (CS)

Courses

CS A101 Introduction to Computer Science 3 Credits

Offers a broad overview of computer science designed to provide students with an appreciation for and an understanding of the many different aspects of computer science. Topics include discrete mathematics, an introduction to programming languages, algorithmic problem solving, basic concepts in hardware, operating systems, networks, graphics, and an overview of the social context of computing. The following basic computer skills are expected: how to use a web browser, send email, edit with a word processor, copy files, open and save documents, and open and close windows.

Special Note: Students who intend to major in computer science may take this course as preparation for their course of study.

Registration Restrictions: If prerequisite is not satisfied, appropriate SAT or ACT scores or approved UAA placement test required.

Prerequisites: MATH A105 with a minimum grade of C.

CS A109 Computer Programming (Languages Vary) 3 Credits

Problem analysis and solution using a selected programming language.

Special Note: May be repeated twice for credit with a change in language.

Registration Restrictions: If prerequisite is not satisfied, appropriate SAT or ACT scores or approved UAA placement test required.

Prerequisites: MATH A105 with a minimum grade of C.

CS A110 Java Programming 3 Credits

Introduction to the syntax of the Java language and object-orientation with an emphasis on writing programs to solve problems.

Registration Restrictions: If prerequisite is not satisfied, appropriate SAT or ACT scores or approved UAA placement test required.

Prerequisites: MATH A105 with a minimum grade of C.

CS A111 Visual Basic .NET Programming 3 Credits

Introduction to the syntax and semantics of the Visual Basic .NET programming language with an emphasis on writing programs to solve problems.

Registration Restrictions: If prerequisite is not satisfied, appropriate SAT or ACT scores or approved UAA placement test required.

Prerequisites: MATH A105 with a minimum grade of C.

Computer Systems Engineering (CSE)

Courses

CSE A102 Introduction to Computer Systems 1 Credit

Introduction to hardware, operating systems, networking, security, storage, maintenance and related topics in computer systems. This course prepares students for applications across a wide range of computer systems for use in Geomatics and GIS courses as well as basic system management in field situations for Geomatics/GIS applications.

CSE A205 Introduction to C Programming for Engineers 3 Credits

Introduction to C programming for engineers. Students will learn a programming language that can be used in many aspects of the engineering field, specifically with applications interfacing with hardware devices. Students will gain basic programming skills, including variables, functions, structures, control structures, and conditional statements with applied reinforcement in engineering applications. Projects will focus on engineering applications in different fields.

Prerequisites: (MATH A151 and MATH A152) or MATH A155.

Construction Management (CM)

Courses

CM A163 Building Construction Cost Estimating 3 Credits

Presents methods and techniques for preparing accurate cost estimates for building construction projects. Emphasizes quantity takeoffs, unit pricing, productivity factors, bidding and negotiation procedures, and cost reporting.

Prerequisites: AET A101 and AET A102 and MATH A105.

CM A201 Construction Project Management I 3 Credits

Examines construction project management methods and processes. Includes project delivery systems introduction and contract types; contract administration procedures; jobsite planning and logistics; and managing labor, materials, and equipment.

Prerequisites: AET A101 and AET A102.

CM A202 Project Planning and Scheduling 3 Credits

Examines concepts and methods for planning and scheduling of construction projects. Includes identifying work elements, estimating activity durations, preparing network schedules and schedule updates, analyzing planned vs. actual project progress and use of computer scheduling software.

Prerequisites: CM A201 and MATH A105.

CM A205 Construction Safety 3 Credits

Examines safety and health practices for the construction industry. Includes developing and implementing construction project site-specific safety plans, analyzing the laws and regulations that govern safety, evaluating construction site hazards and environmental conditions, and incident investigation and reporting.

Prerequisites: CM A201.

CM A213 Construction Civil Technology 4 Credits

Outlines elements of civil design and construction, including soils and soil properties, roads, earthwork, and utilities using local, state and federal regulations. Students will also be introduced to construction surveying.

Registration Restrictions: Appropriate SAT, ACT or UAA-approved math placement test scores may be used in lieu of the MATH A105 prerequisite.

Prerequisites: AET A101 with a minimum grade of C and AET A102 with a minimum grade of C and MATH A105 with a minimum grade of C.

CM A263 Civil Construction Cost Estimating 3 Credits

Presents methods and techniques for preparing accurate cost estimates for earthwork, roads, highways, underground utilities, and site work. Emphasizes quantity surveys, unit costs, production factors, bidding, and construction equipment management.

Prerequisites: CM A201 and MATH A105.

CM A295 Construction Management Internship 3 Credits

Places students in building construction offices related to student educational program and occupational objectives. Direct supervision by contractor professional, program faculty, and Career Services coordinator.

Registration Restrictions: Departmental approval.

CM A301 Construction Project Management II 3 Credits

Analyzes advanced subjects in construction project management. Includes project procurement, project delivery methodology, managing project change, quality control, claims and disputes, and labor relations.

Prerequisites: CM A163 and CM A202.

CM A313 Soils in Construction 3 Credits

Examines the properties and classifications of soils encountered and used in construction. Includes soils investigation, soils stress analysis, embankment construction, and excavation works and supports.

Prerequisites: CM A213 and MATH A151.

CM A331 Statics and Strength of Materials 3 Credits

Analyzes forces and the mechanics of materials for structural elements and structural assemblies. Includes the fundamentals of statics; stress, strain and deformation; shear and bending moment stresses in beams; and column analysis.

Prerequisites: AET A231 and (MATH A152 with a minimum grade of C or MATH A155 with a minimum grade of C).

CM A401 Construction Law 3 Credits

Examines the significant legal topics affecting general contractors, subcontractors, project owners and surety bond agents. Integrates legal issues with design and construction services, focusing on risk management and liability awareness.

Prerequisites: CM A301 and (BA A241 or JUST A241).

CM A422 Sustainability in the Built Environment 3 Credits

Examines sustainability concepts and the implementation of sustainability principles in the design and construction of the built environment. Evaluates human-constructed development and resource preservation challenges in the context of the local and global natural environment.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses, junior standing, plus completion of one Tier 2 Natural Science course and one other Tier 2 GER course.

Attributes: UAA Integrative Capstone GER.

CM A440 Financial Management for Construction 3 Credits

Analyzes financial management topics relevant to the construction management professional, including the interpretation of financial statements, financial ratios, applications of engineering economy, cash flow analysis, construction financing, and cost information systems.

Prerequisites: ACCT A202 and CM A301.

CM A450 Construction Management Professional Practice 3 Credits

Integrates educational and construction management principles using case studies. Emphasizes teamwork and professional competency. Includes the evaluation of project goals, conditions, and design documents to produce a plan for delivery and control.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses.

Prerequisites: CM A301 and CM A495.

Attributes: UAA Integrative Capstone GER.

CM A460 Construction Equipment Management and Methods 3 Credits

Analyzes the management of construction equipment and methods employed in different sectors of the construction industry including buildings, heavy-highway, and utilities construction. Includes earthmoving operations, appropriate equipment selection, operating costs, and fleet management.

Prerequisites: CM A263 and CM A313.

CM A495 Advanced Construction Management Internship 3 Credits

Provides career development and exploration through work experience in the field by placement in a construction management home or field office. Intern will perform duties directly related to construction management functions.

Registration Restrictions: Departmental approval

Counseling (COUN)

Courses

COUN A101 Introduction to Career Exploration 1 Credit

An introduction to career exploration. Includes exploring self-concept, values, interests, skills, aptitudes, work orientation, occupational information and decision making.

COUN A107 Managing Stress 1 Credit

Examines general causes of stress and effective methods to eliminate or manage stress in your own life.

Creative Writing & Lit Arts (CWLA)

Courses

CWLA A262 Introduction to Creative Writing: Poetry 3 Credits

Examines the fundamental problems and questions of writing poetry. Includes discussing and practicing technique and process and other more philosophical issues of poetry. Advances student understanding of the elements of poetry.

CWLA A263 Introduction to Creative Writing: Fiction 3 Credits

Examines the fundamental problems and questions of writing fiction. Includes discussing and practicing technique and process and other more philosophical issues of fiction. Advances student understanding of the elements of fiction.

CWLA A265 Introduction to Creative Writing: Nonfiction 3 Credits

Examines the fundamental problems and questions of writing creative nonfiction. Includes discussing and practicing matters of technique and process and other more philosophical issues of nonfiction. Advances student understanding of the elements of creative nonfiction and types of nonfiction, including the personal essay, memoir and reportage.

CWLA A652 Graduate Writer's Workshop: Poetry 5 Credits

Advanced study and practice of the forms and techniques of poetry with close analysis of each student's creative work.

Special Note: May be repeated twice for degree credit.

Registration Restrictions: Admission to MFA program in creative writing

CWLA A662 Graduate Writer's Workshop: Fiction 5 Credits

Advanced study and practice of the forms and techniques of fiction with close analysis of each student's creative work.

Special Note: May be repeated twice for degree credit.

Registration Restrictions: Admission to MFA program in creative writing.

CWLA A672 Graduate Writer's Workshop: Literary Nonfiction 5 Credits

Advanced study and practice of the forms and techniques of literary nonfiction with close analysis of each student's creative work.

Special Note: May be repeated twice for degree credit.

Registration Restrictions: Admission to MFA program in creative writing.

CWLA A690 Studies in Form and Theory 5 Credits

An examination of one or more forms of literary art emphasizing elements discernible in craft and theory as it applies to both style and content.

Special Note: May be repeated twice for degree credit with a change in subtitle.

Registration Restrictions: Admission to MFA program in creative writing.

CWLA A695 Literary Practicum 1-5 Credits

Provides students with opportunities for professional development in writing, publishing, or teaching by focusing on literary projects of their own devising or by collaborating on projects with public, educational, or literary communities. Student is responsible for planning, organizing, and submitting projects to program director.

Special Note: Practicum may be taken only after satisfactorily completing 20 credits of coursework. May be repeated for a maximum of 5 credits.

Registration Restrictions: Admission to MFA program in creative writing; permission of program director.

CWLA A699 Thesis 5 Credits

Book-length collection of the graduate student's creative work, introduced by an in-depth analytical essay addressing the body of the creative work in terms of process, craft, and theory. Also part of the thesis evaluation is an annotated bibliography, oral defense of the thesis, and public reading.

Special Note: Must have satisfactorily completed 30 credits to enroll. May be repeated for a total of 10 credits.

Registration Restrictions: Admission to MFA program in creative writing; permission of advisor.

Culinary Arts (CA)

Courses

CA A101 The Hospitality Industry: Careers, Trends, and Practices 2 Credits

Explores myriad career titles and opportunities in the hospitality industry and reviews emerging labor trends.

Registration Restrictions: Must be a declared culinary arts major or hospitality restaurant management major. Appropriate SAT, ACT or UAA-approved math placement test scores may be used in lieu of MATH A055.

Prerequisites: WRTG A111 with a minimum grade of C and MATH A055 with a minimum grade of C.

CA A103 Culinary Skill Development Laboratory 4 Credits

Introduces and provides student with a comprehensive theoretical and practical foundation in commercial kitchen practices.

Registration Restrictions: Must be a declared culinary arts major or hospitality restaurant management major. Must have current ServSafe certification.

Prerequisites: CA A101 with a minimum grade of C and CA A104 with a minimum grade of C and CA A107 with a minimum grade of C and CA A110 with a minimum grade of C and CA A119 with a minimum grade of C.

Corequisites: CA A111.

CA A104 Sanitation 2 Credits

Focuses on sanitation principles, concepts, methods, codes and regulations current to the foodservice industry. Prepares students to take ServSafe national certification exam.

Registration Restrictions: Must be a declared culinary arts major or hospitality restaurant management major. Appropriate SAT, ACT or UAA-approved math placement test scores may be used in lieu of MATH A055.

Prerequisites: WRTG A111 with a minimum grade of C and MATH A055 with a minimum grade of C.

CA A107 Cost Control 3 Credits

Focuses on critical control points in the foodservice cost control cycle. Prepares student to analyze costs and make foodservice operation decisions.

Registration Restrictions: Must be a declared culinary arts major or hospitality restaurant management major. Appropriate SAT, ACT or UAA-approved math placement test scores may be used in lieu of MATH A055.

Prerequisites: WRTG A111 with a minimum grade of C and MATH A055 with a minimum grade of C.

CA A110 Quantity Food Purchasing 2 Credits

Covers foodservice industry purchasing practices and standards.

Registration Restrictions: Must be a declared culinary arts major or hospitality restaurant management major. Appropriate SAT, ACT or UAA-approved math placement test scores may be used in lieu of MATH A055.

Prerequisites: WRTG A111 with a minimum grade of C and MATH A055 with a minimum grade of C.

CA A111 Bakery Skill Development Laboratory 4 Credits

Introduces and provides student with a comprehensive theoretical and practical foundation in commercial baking practices.

Registration Restrictions: Must be a declared culinary arts major or hospitality restaurant management major

Prerequisites: CA A101 with a minimum grade of C and CA A104 with a minimum grade of C and CA A107 with a minimum grade of C and CA A110 with a minimum grade of C and CA A119 with a minimum grade of C.

Corequisites: CA A103.

CA A114 Beverage Management 3 Credits

Reviews the history of the beverage industry, including alcohol and non-alcohol beverages. Focuses on the management and operations of beverage service. Covers legal responsibilities of serving alcohol and awareness of alcohol abuse.

Special Note: Students are prepared to take alcohol server exam that will allow them to legally serve alcohol in the state of Alaska.

Registration Restrictions: Must be a declared culinary arts major or hospitality restaurant management major. Must be 21 years or older.

CA A115 Gourmet Cooking, Healthy Style 1 Credit

Features "Low fat" methods of cooking for home use. Students prepare and sample a variety of different foods including meat and meatless entrees, fresh and frozen vegetables, starches, appetizers, soups, salads, and holiday meals.

CA A119 Principles of Nutrition 3 Credits

Introduces human nutrition in the life cycle, including food sources and requirements of nutrients; physiological and metabolic aspects of nutrient function; food choices, selection, cultural and contemporary issues of concern to consumers.

CA A201 A la Carte Kitchen 4 Credits

Emphasizes cooking techniques, ingredients and professionalism in a commercial kitchen.

Special Note: Must have instructor approval to retake course.

Registration Restrictions: Valid ServSafe certification and culinary arts/hospitality management major.

Prerequisites: CA A103 with a minimum grade of C and CA A111 with a minimum grade of C.

CA A202 Advanced Bakery 4 Credits

Explores advanced bakery, pastry, confectionary and presentation techniques in a commercial bakery environment. Emphasizes production processes, service, portion controls, safety and sanitation in a commercial bakery.

Special Note: Must have instructor approval to retake course.

Registration Restrictions: Valid ServSafe certification and culinary arts/hospitality management major.

Prerequisites: CA A103 with a minimum grade of C and CA A111 with a minimum grade of C.

CA A223 Catering Management 2 Credits

Introduces fundamental concepts of catering management, planning and production.

Prerequisites: CA A101 with a minimum grade of C and CA A103 with a minimum grade of C and CA A104 with a minimum grade of C and CA A107 with a minimum grade of C and CA A110 with a minimum grade of C and CA A111 with a minimum grade of C.

CA A224 Hospitality Service 3 Credits

Focuses on hands-on instruction of dining room service and management. Student will understand and demonstrate duties of front-of-the-house service to include server, greeter, busser, steward and cashier. Reviews the process of merchandising food, beverages and services. Examines the use of table topography, glassware, china, linen and serveware in a professional restaurant operation.

Special Note: Must have instructor approval to retake course.

Registration Restrictions: Valid ServSafe certification and culinary arts/hospitality management major.

Prerequisites: CA A201 with a minimum grade of C.

CA A225 Hospitality Concept Design 3 Credits

Examines concept development and business planning for professional foodservice facilities. Explores menu planning/pricing, operating, budgeting, and production models in foodservice management. Explores trends in technology, human resource management and financing.

Special Note: Must have instructor approval to retake course.

Registration Restrictions: Must be culinary arts or hospitality management major

Prerequisites: CA A201 with a minimum grade of C.

CA A230 Foodservice Management 3 Credits

Covers supervisory and management responsibilities within hospitality foodservice operations. Emphasizes communication, problem solving, leadership, human resource planning, training, motivating and organizational skills. Labor costs, cost control and the legal environment are also examined.

Special Note: Must have instructor permission to retake course.

Registration Restrictions: Must be Culinary Arts or Hospitality Management major

CA A295 Foodservice Internship 3 Credits

Provides supervised workplace training in selected foodservice industry settings. Integrates knowledge and skills through work designed to meet students' individual competency needs and career objectives. Requires minimum of 225 hours at worksite plus 15 hours of consultation with faculty mentor.

Registration Restrictions: Must be declared culinary arts major

Prerequisites: CA A103 with a minimum grade of C and CA A111 with a minimum grade of C.

CA A490 Current Topics in Food and Hospitality 1-6 Credits

Examines current topics in culinary arts resulting from special demands of the industry or special faculty expertise.

CA A495 Hospitality Internship 6 Credits

Allows for application of theoretical concepts and principles in the hospitality restaurant management work environment. Emphasizes professional competency in customer relations and service, human resource management, operations management, food and beverage cost control, marketing, ethics, and service quality control. Requires a minimum of 560 hours at work site plus 40 hours of related seminar instruction and project work.

Special Note: Requires professional attire.

Registration Restrictions: Completion of Business Core and UNLV or NAU Core with cumulative minimum GPA of 2.00; completion of GER Tier 1 (basic college-level skills) courses.

Attributes: UAA Integrative Capstone GER.

Dance (DNCE)

Courses

DNCE A061 Elementary Ballet 1 Credit

Introduction to classical ballet for the student with little or no background in dance. Simple exercises and combinations introduce fundamental ballet positions and terminology. Correct anatomical alignment and injury prevention stressed.

Special Note: May be repeated three times for credit.

DNCE A071 Elementary Modern Dance 1 Credit

Introduction to elementary modern techniques for the avocational student with little or no background in modern dance. Simple exercises and combinations introduce fundamental modern dance positions, movements, and terminology. Correct alignment stressed in basic exercises and elementary locomotor combinations.

Special Note: May be repeated three times for credit.

DNCE A081 Elementary Jazz 1 Credit

Introductory course in the fundamentals of jazz for the student with little or no dance background. Exercises and movement combinations introduce principles of jazz rhythm and style. Correct anatomical alignment and injury prevention stressed.

Special Note: May be repeated three times for credit.

DNCE A101 Fundamentals of Ballet I 2 Credits

Beginning ballet technique introduced through barre and center floor work. Emphasis on correct anatomical alignment and injury prevention.

Special Note: May be repeated three times for credit.

DNCE A121 Contemporary Modern I 2 Credits

Introduces basic skills of contemporary modern dance through movement exercises, movement phrases and creative movement inquiry. Designed for students with little to no experience who wish to explore dance as aesthetic practice.

Special Note: May be repeated for a maximum of 8 credits.

DNCE A124 Dance for Musical Theatre I 2 Credits

Introduces the vocabulary, variety of movement styles and performance techniques inherent in American musical theatre, including the ability to vocalize correctly during movement. Covers a range of time periods from the 1920s to the present.

Special Note: May be repeated for a maximum of 8 credits.

Crosslisted With: THR A124.

DNCE A131 Fundamentals of Music-Based Jazz I 2 Credits

Basic jazz dance technique rooted in the complexity, variety, and spontaneity of jazz music. Includes the concepts of rhythmic manipulation and swing with an introduction to musical movement qualities, improvisation, and jazz history. Warm-up exercises and movement combinations develop jazz skills and promote strength and flexibility. Correct alignment and injury prevention stressed throughout class.

Special Note: May be repeated three times for credit.

DNCE A147 Popular American Social Dance 2 Credits

Theory and practice of partnership social dance in the contemporary United States. Designed for learners who wish to expand their skills in social partnership dance or for overall development of movement skills. Specific dances will be examined in their historical and cultural contexts in order to find a closer connection to their movement forms.

Special Note: May be repeated three times for credit.

DNCE A148 Hip Hop and Street Dance Styles I 2 Credits

Introduces hip hop and street dance techniques and styles through a variety of movement exercises. Introduces hip hop culture and history. Designed for the student with little or no prior experience in dance.

Special Note: May be repeated for a maximum of 8 credits.

DNCE A151 Fundamentals of Tap I 1 Credit

Beginning tap dance techniques. Introduces basic tap dance skills through warm-up exercises and movement combinations. Rhythmic improvisation explored. Correct anatomical alignment and injury prevention stressed.

Special Note: May be repeated three times for credit.

DNCE A170 Dance Appreciation 3 Credits

Develops an appreciation of dance for observers and participants through readings, lectures, videos, writing exercises, live performances, and movement and discussion sessions. Explores dance in social and cultural contexts and as an aesthetic and kinesthetic experience.

Examines dance across various cultures along with its development as an art form in Europe and America. A lecture course with four to seven dance studio movement sessions per semester.

Attributes: UAA Fine Arts GER.

DNCE A223 Contemporary Modern II 2 Credits

Expands contemporary modern dance skills and movement vocabulary through longer warm-ups and movement combinations. Explores contemporary modern dance history. Designed for students with previous dance experience.

Special Note: May be repeated for a maximum of 8 credits.

Prerequisites: DNCE A121 with a minimum grade of C.

DNCE A224 Dance for Musical Theatre II 2 Credits

Continuation of Dance for Musical Theatre I, building on the foundation of vocabulary, movement styles, vocalizing, and performance techniques. Techniques in improving audition skills and perfecting performance ability. Encompasses a range of time periods, from the 1920s to the present.

Special Note: May be repeated three times for credit.

Crosslisted With: THR A224.

Prerequisites: DNCE A124 with a minimum grade of C or THR A124 with a minimum grade of C.

DNCE A262 Theory and Improvisation 3 Credits

Development of improvised movement material. Elements of time, space and dynamics studied through assignments that focus on movement analysis and performance. Students apply improvisational techniques that are expected to be employed as part of the compositional and choreographic process.

Registration Restrictions: Instructor permission required.

Prerequisites: DNCE A121 with a minimum grade of C or THR A221 with a minimum grade of C.

DNCE A290 Selected Topics in Dance 1-3 Credits

Introduction to current topics in dance performance and theory.

Topics will depend on special demands of the dance season or faculty expertise.

Special Note: May be repeated for credit.

Registration Restrictions: Prerequisites vary according to topic.

DNCE A321 Intermediate Contemporary Modern I 2 Credits

Increases the student's skill level and movement vocabulary in contemporary modern technique. Structured technical exercises and complex movement combinations increase strength, flexibility and quality of movement with exploration of performance aesthetics.

Special Note: May be repeated for a maximum of 8 credits.

Prerequisites: DNCE A223 with a minimum grade of C.

DNCE A322 Intermediate Contemporary Modern II 2 Credits

Continuation and elaboration of Intermediate Contemporary Modern I technique. Emphasizes refinement of performance technique, movement dynamics and improvisational skills. Continues exploration of modern dance history, philosophy and aesthetics.

Special Note: May be repeated for a maximum of 8 credits.

Registration Restrictions: Instructor permission

Prerequisites: DNCE A321 with a minimum grade of C.

DNCE A361 Approaches to Dance Composition 3 Credits

Introduction to the process of creating movement studies as a foundation for larger works of dance. Universal elements of composition and the creative process are explored from multiple perspectives. Final movement study project will be required.

Special Note: May be repeated twice for credit.

Registration Restrictions: Instructor permission

Prerequisites: DNCE A223 with a minimum grade of C and DNCE A262 with a minimum grade of C.

DNCE A365 Dance Repertory and Performance I 3 Credits

Designed to address key concepts of dance making with a focus on improvisation, composition and choreographic process. Class work focuses on learning and refining works of choreography while also examining the social, political or cultural forces that influence performance works.

Special Note: May be repeated three times for credit.

Registration Restrictions: Audition required.

Prerequisites: DNCE A223 with a minimum grade of C or DNCE A224 with a minimum grade of C or THR A224 with a minimum grade of C.

DNCE A370 Interdisciplinary Dance Studies: Issues and Methods 3 Credits

Explores how dance scholars use methods drawn from a variety of disciplines to consider dance as movement, culture, artifact, language, and art. Applies and integrates these methods in relation to video materials and live dance events. Case studies will vary according to student interest and opportunities for viewing dance locally.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing.

Prerequisites: DNCE A170 with a minimum grade of C and (WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C).

Attributes: UAA Integrative Capstone GER.

DNCE A395 Advanced Practicum: Performance 1-3 Credits

Performance practicum for juniors and seniors. Advanced participation in dance production as a dancer, performance artist or choreographer.

Special Note: May be repeated for up to 12 total credits.

Registration Restrictions: Junior or senior standing. Audition and faculty permission.

DNCE A465 Advanced Performance and Choreography Workshop 3 Credits

Designed for the advanced student with a focus on multiple skills to assist in the growth of the movement artist as performer and creator. Advanced exploration of the spatial and qualitative aspects of dance technique with the refinement of complex patterning skills and attention to details of dramatic or emotional content. Techniques of improvisation, abstraction, and choreography applied to movement studies as an ongoing class activity. Explorations into the theoretical foundations of designing and structuring the dance class along with the aesthetics and history of contemporary dance technique.

Special Note: May be repeated three times for credit.

Registration Restrictions: Instructor permission by audition required.

Prerequisites: DNCE A322 with a minimum grade of C.

DNCE A475 Dance Repertory and Performance II 3 Credits

Advanced exploration of the spatial and qualitative aspects of dance technique. Refinement of complex patterning skills and attention to details of dramatic or emotional content. Skills related to the creation and performance of choreography further developed. Examination of performance theory and the social, cultural and political forces that influence and shape significant performance works.

Special Note: May be repeated three times for credit.

Prerequisites: DNCE A365 with a minimum grade of C.

DNCE A490 Selected Topics in Dance 1-3 Credits

Current topics in dance performance and theory resulting from special demands of the dance season or special faculty expertise.

Special Note: May be repeated for a maximum 12 credits with change of topic. Additional fees may apply depending on topic.

Registration Restrictions: Junior or senior standing.

Dental Assisting (DA)

Courses

DA A101 Essentials of Dentistry 3 Credits

Provides foundations in general dentistry pertaining to dental assisting. Introduces basic dental procedures, safety, dental specialties, and dental anatomy.

Registration Restrictions: Departmental approval.

DA A102 Infection Control in Dentistry 2,3 Credits

Introduces infection control principles necessary for dental auxiliaries to operate safely within a dental office and to prevent the spread of microbial diseases.

Registration Restrictions: Departmental approval.

DA A110 Dental Radiography 3 Credits

Defines radiation physics and biology with emphasis on radiation health, safety, protection, radiation production, x-ray machines, components and function, and image receptors. Includes study of essential radiographic techniques, film processing techniques, and identification of radiographic anatomy.

Registration Restrictions: Departmental approval.

DA A110L Dental Radiography Laboratory 1 Credit

Applies information learned in Dental Radiography (DA A110) lecture on radiation health, safety, protection, x-ray machines, components and function, and image receptors. Includes study of essential radiographic techniques, film processing techniques, and identification of radiographic anatomy.

Registration Restrictions: Departmental approval.

Prerequisites: DA A110 or concurrent enrollment.

DA A127 Dental Office Administration 3 Credits

Provides entry-level foundation of dental reception and practice management as it pertains to dental assisting. Introduces dental front-office skills and dental services management.

Registration Restrictions: Instructor approval

DA A130 Chairside Techniques I 4 Credits

Introduces beginning skills necessary to function as a chairside dental assistant, and basic laboratory applications of restorative materials and alginates. Emphasis on developing clinical skills in four-handed dentistry techniques.

Registration Restrictions: Departmental approval.

DA A150 Biomedical and Dental Sciences for Dental Assistants 3 Credits

Presents dental terminology, anatomy of oral structures, anatomy and physiology of the head and neck. Introduces the body systems, oral embryology and histology, oral pathology and pharmacology as they relate to dental assisting.

Registration Restrictions: Departmental approval

Prerequisites: DA A101.

DA A160 Materials in Dentistry 3 Credits

Examines properties and manipulation of gypsum, impression materials, custom trays, night guards, sealants, and bleaching trays. Includes the physical and chemical properties of restorative materials.

Registration Restrictions: Departmental approval.

Corequisites: DA A160L.

DA A195A Clinical Practicum I 1 Credit

Provides beginning dental assisting experiences in a clinical setting.

Registration Restrictions: Instructor approval

DA A201 Chairside Techniques II 4 Credits

Continues Chairside Techniques I and Dental Radiography. Emphasizes advanced dental assisting skills and provides practice for those previously acquired. Covers advanced rubber dam application, panoramic procedures, exposing radiographs on patients, vital signs, medical and dental histories, temporary crown construction, and oral health and nutrition.

Registration Restrictions: Departmental approval.

Prerequisites: DA A110 and DA A110L and DA A130.

DA A202 Dental Specialties for Dental Auxiliaries 3 Credits

Expands and applies information and skills necessary in endodontics, oral and maxillofacial surgery, orthodontics, pediatrics, periodontics, and fixed/removable prosthodontics.

Registration Restrictions: Departmental approval.

Prerequisites: DA A101 and DA A130.

DA A295A Clinical Practicum II 3 Credits

Applies clinical dental assisting experience in an extramural setting. Students will be assigned to one or more dental offices. Assisting in general dentistry is emphasized.

Registration Restrictions: Departmental approval.

Dental Hygiene (DH)

Courses

DH A201 Oral Histology and Embryology 2 Credits

Presents information on histology and embryology of the oral cavity, with emphasis on dental and periodontal structures. Includes discussion on dental accretions and cariology.

Registration Restrictions: Departmental approval.

Prerequisites: BIOL A111 and BIOL A112.

DH A202 Basic Techniques for Dental Hygienists 7 Credits

Introduces basic procedures used in dental hygiene treatment, including data gathering, patient education, and basic instrumentation. Emphasizes skill development in basic instrumentation and infection control.

Registration Restrictions: Departmental approval; BLS certification.

Prerequisites: BIOL A111 and BIOL A112 and (BIOL A240 or BIOL A241).

DH A204 Anatomy of the Orofacial Structures 2 Credits

Provides students with anatomical knowledge necessary to perform technical skills within the oral cavity.

Registration Restrictions: Departmental approval.

Prerequisites: BIOL A111 and BIOL A112.

DH A222 Adjunctive Techniques for Dental Hygienists 3 Credits

Introduces adjunctive techniques used in dental hygiene treatment. Emphasizes skills applied in the practice of dental hygiene, such as polishing, sealant placement, fluoride application and use of mechanized debridement.

Registration Restrictions: Departmental approval and current BLS certification

Prerequisites: DA A110 with a minimum grade of C and DA A110L with a minimum grade of C and DH A201 with a minimum grade of C and DH A202 with a minimum grade of C and DH A204 with a minimum grade of C.

DH A292D Clinical Seminar I 1 Credit

Provides procedural instruction and general support for Clinical Practicum I. Emphasis is placed on review of treatment and case presentations.

Registration Restrictions: Departmental approval.

Prerequisites: DH A202 with a minimum grade of C.

Corequisites: DH A295D.

DH A295D Clinical Practicum I 4 Credits

Provides opportunity for students to achieve clinical skill competency with patients presenting as periodontally healthy or with signs of gingivitis. This course is conducted in a clinical setting with volunteer patients and individualized instruction.

Registration Restrictions: Departmental approval, BLS certification, and required immunizations.

Prerequisites: DH A202 with a minimum grade of C.

Corequisites: DH A292D.

DH A302 Advanced Instrumentation for Dental Hygienists 1 Credit

Provides instruction in advanced instrumentation techniques and root planing used in dental hygiene therapeutic treatment. Explores root anatomy through drawings and carvings.

Registration Restrictions: Departmental approval and current BLS certification

Prerequisites: DH A222 with a minimum grade of C and DH A295D with a minimum grade of C.

DH A310 Oral Pain Control 3 Credits

Examines pharmacology, armamentarium, anatomical and physiological considerations, administration techniques, and potential complications of local anesthesia. Analyzes pharmacology, administration techniques, medical contraindications, and management complications accompanying administration and monitoring of nitrous oxide.

Special Note: Satisfies requirements of 12 ACC 28.340, Alaska State Dental Statutes and eligibility to take the Western Regional Board Examination for certification of dental hygienists to administer local anesthetics. It also meets regulation requirements for dental hygienists to administer and monitor nitrous oxide analgesia (12 AAC 18.720).

Registration Restrictions: Departmental approval; BLS certification.

Prerequisites: DH A204 with a minimum grade of C and DH A295D with a minimum grade of C and DH A365 with a minimum grade of C.

DH A311 Periodontics 2 Credits

Uses previous knowledge of periodontal structures and microbiology to enable the student to assess periodontal conditions and formulate treatment plans.

Registration Restrictions: Departmental approval.

Prerequisites: (BIOL A240 with a minimum grade of C or BIOL A241 with a minimum grade of C) and DH A201 with a minimum grade of C and DH A202 with a minimum grade of C.

DH A314 Pathology of Oral Tissues 2 Credits

Applies and expands knowledge of anatomy and microbiology to familiarize the student with signs, symptoms, and contagion recognition of selected diseases of the oral cavity, and with systemic diseases that manifest themselves in the oral cavity.

Registration Restrictions: Departmental approval.

Prerequisites: (BIOL A240 with a minimum grade of C or BIOL A241 with a minimum grade of C) and DH A202 with a minimum grade of C and DH A204 with a minimum grade of C.

DH A316 Professional Dental Hygiene Practice 1.5 Credit

Discusses ethical and legal concerns in the dental hygiene profession. Explores issues relevant to the practice of dental hygiene.

Registration Restrictions: Departmental approval.

Prerequisites: DH A392C with a minimum grade of C.

DH A321 Current Periodontal Therapies 2 Credits

Emphasizes theoretical instruction and application of current nonsurgical techniques in the treatment of periodontal disease.

Registration Restrictions: Departmental approval.

Prerequisites: DH A311 with a minimum grade of C.

DH A324 Community Dental Health I 2 Credits

Provides theoretical instruction on community dental health epidemiology, and discusses public health research methodology. Includes development and implementation of a basic community dental health care project.

Registration Restrictions: Departmental approval; BLS certification.

Prerequisites: DH A314 with a minimum grade of C and DH A395C with a minimum grade of C.

DH A360 Restorative Techniques for Dental Auxiliaries 5 Credits

Builds on previous coursework to introduce restorative skills for allied dental personnel. Provides supervised laboratory instruction on typodonts, with initial emphasis on Class I and Class II restorations. Emphasizes Class III and IV and multiple-surface posterior restorations towards the end of the course. Applies restorative function skills in the clinical situation under direct supervision of clinical faculty.

Registration Restrictions: Second year dental hygiene student, licensed dental hygienist, or certified dental assistant; departmental approval.

Prerequisites: DA A110 with a minimum grade of C and (DA A150 with a minimum grade of C or DH A204 with a minimum grade of C).

DH A365 Pharmacology for Dental Hygienists 2 Credits

Discusses general pharmacological concepts and applications; nature of drug reactions; individual response to drugs; principles of neuropharmacology; toxicology; anti-infective therapy; and effects of drugs on cardiovascular, endocrine, and other body systems. Emphasizes drugs used in dentistry.

Registration Restrictions: Departmental approval.

Prerequisites: CHEM A104 with a minimum grade of C and DH A202 with a minimum grade of C.

DH A390 Selected Topics in Dental Hygiene 1-6 Credits

Studies emerging trends, standards, and theories in dental hygiene. Explores opportunities for clinical application.

Special Note: May be repeated for credit with change of subtitle. A maximum of 6 credits may be applied to the Bachelor of Science in Dental Hygiene.

Registration Restrictions: Departmental approval

DH A392C Clinical Seminar II 1 Credit

Provides discussion and evaluation of clinical experiences in Clinical Practicum II. Emphasizes review of treatment and case presentations.

Registration Restrictions: Departmental approval

Prerequisites: DH A222 with a minimum grade of C and DH A295D with a minimum grade of C and DH A311 with a minimum grade of C.

Corequisites: DH A395C.

DH A392D Clinical Seminar III 1 Credit

Provides discussion and evaluation of clinical experiences in Clinical Practicum III. Emphasizes review of treatment and case presentations of patients exhibiting moderate to advanced periodontal disease.

Registration Restrictions: Departmental approval

Prerequisites: DH A321 with a minimum grade of C and DH A395C with a minimum grade of C.

Corequisites: DH A395D.

DH A395C Clinical Practicum II 5 Credits

Provides opportunity for students to achieve clinical skill competency with patients presenting with mild to moderate periodontal disease. Conducted in a clinical setting with volunteer patients and individualized instruction.

Registration Restrictions: Departmental approval; BLS certification, and required immunizations.

Prerequisites: DH A222 with a minimum grade of C and DH A295D with a minimum grade of C and DH A311 with a minimum grade of C.

Corequisites: DH A392C.

DH A395D Clinical Practicum III 6 Credits

Provides opportunity for students to achieve clinical skill competency with patients presenting with moderate to advanced periodontal disease. Conducted in a clinical setting with volunteer patients and individualized instruction.

Registration Restrictions: Departmental approval, BLS certification, and required immunizations.

Prerequisites: DH A321 with a minimum grade of C and DH A395C with a minimum grade of C.

Corequisites: DH A392D.

DH A395E Community Practicum in Dental Hygiene 1-3 Credits

Applies basic dental hygiene skills in the clinical situation under supervision of clinical faculty. Emphasizes Periodontal Case Type I and II patient care.

Special Note: May be repeated once for a maximum of 3 credits.

Registration Restrictions: Departmental approval and current cardiopulmonary resuscitation certification.

Prerequisites: DH A295D.

DH A395R Supplemental Dental Hygiene Clinical Practicum 1-3 Credits

Provides opportunity for students to obtain additional clinical experience outside required clinical courses. Allows students to improve and/or maintain skills. This course is conducted in a clinical setting with volunteer patients and individualized instruction.

Registration Restrictions: Departmental approval

DH A398 Individual Research 1-4 Credits

Engages students in research related to dentistry. Activities might include literature search and review, experimental design, specimen collection, research techniques, data collection and analysis, and manuscript preparation and submission. Specific activities are dependent on the type and stage of research at the time of course enrollment.

Registration Restrictions: Junior or higher standing, department approval

DH A424 Community Dental Health II 3 Credits

Presents advanced theoretical instruction on community dental health and research methodology, with emphasis on project design, development, and implementation for diverse populations.

Registration Restrictions: Departmental approval and completion of GER Tier 1 (basic college-level skills) courses.

Prerequisites: DH A324 with a minimum grade of C and (STAT A200 with a minimum grade of C or STAT A253 with a minimum grade of C).

Attributes: UAA Integrative Capstone GER.

DH A460 Instructional Concepts in Dental Hygiene 1 Credit

Emphasizes foundational concepts in post-secondary instructional methodology specific for dental hygiene. Includes university organizational structure, course content guide and syllabus development, student privacy, American Dental Association standards, and instructor calibration.

Registration Restrictions: Departmental approval.

Prerequisites: DH A395C with a minimum grade of C.

DH A495B Instructional Practicum in Dental Hygiene 1-4 Credits

Emphasizes practical teaching experience in laboratory or clinical sessions. Combines classroom preparation, presentation of material, competency assessment, and lecture correlation under the supervision of program faculty.

Special Note: Placement availability may be limited. May be repeated twice for a maximum of 4 credits.

Registration Restrictions: Instructor permission, departmental approval, and cardiopulmonary resuscitation certification.

Prerequisites: DH A321 with a minimum grade of C and DH A395C with a minimum grade of C.

DH A495E Rural Practicum in Dental Hygiene 1-3 Credits

Applies dental hygiene skills in the rural clinical situation under the supervision of clinical faculty. Emphasizes dental needs of rural communities.

Special Note: May be repeated twice for a maximum of 3 credits.

Registration Restrictions: AAS in Dental Hygiene; departmental approval; current cardiopulmonary resuscitation certification.

Diagnostic Medical Sonography (DMS)

Courses

DMS A101 Introduction to Sonography 2 Credits

Introduces the history of ultrasound, its medical application, the sonographer's role, ergonomics, terminology, approaches to scanning, anatomical relationships and sectional anatomy.

Registration Restrictions: Department approval

DMS A102 Foundations of Sonography 2 Credits

Introduces the profession and basic skills of sonography with emphasis on sonographic terminology, sonographer and patient safety, effective communication, and legal/ethical aspects.

Registration Restrictions: Departmental approval

DMS A103 Patient Care in Sonography 2 Credits

Introduces general patient care and communication skills used working in sonography. Includes clinical procedures and techniques, infection control, and safety.

Registration Restrictions: Department approval

DMS A105 Principles and Instrumentation I 3 Credits

Introduces the physical principles of sound waves, acoustic parameters, ultrasound transducers, instrumentation, equipment operation, and the methods of image formation and storage.

Registration Restrictions: Department approval

DMS A107 Abdominal Sonography I 2 Credits

Introduces the anatomy and physiology of abdominal vasculature, organs, systems and structures. Includes normal sonographic appearance of anatomy.

Registration Restrictions: Department approval

DMS A109 OB and Gyn Sonography I 3 Credits

Introduces the embryology, anatomy and physiology of the female reproductive system and developing fetus. Includes normal sonographic appearance of anatomy.

Registration Restrictions: Department approval

DMS A205 Principles and Instrumentation II 3 Credits

Discusses advanced imaging, Doppler principles, image artifacts, quality assurance programs and biologic effects. Includes application of advanced and Doppler imaging methods.

Registration Restrictions: Department approval

Prerequisites: DMS A105 with a minimum grade of C.

DMS A207 Abdominal Sonography II 2 Credits

Discusses the pathologic conditions of abdominal vasculature, organs, systems and structures. Includes sonographic findings and scanning protocols.

Registration Restrictions: Departmental approval

Prerequisites: DMS A107 with a minimum grade of C.

DMS A209 OB and Gyn Sonography II 2 Credits

Discusses the pathologic conditions of the female reproductive system and fetal development. Includes sonographic findings and scanning protocols.

Registration Restrictions: Department approval

Prerequisites: DMS A109 with a minimum grade of C.

DMS A211 Small Parts Sonography 1 Credit

Introduces the anatomy, physiology and pathologic conditions of superficial structures and small parts. Includes normal sonographic appearance of anatomy, sonographic findings and scanning protocols.

Registration Restrictions: Departmental approval

DMS A213 Vascular Technology 2 Credits

Introduces the anatomy, physiology, hemodynamics and pathologic conditions of the cardiovascular system. Includes normal sonographic appearance of anatomy, sonographic findings and scanning protocols.

Registration Restrictions: Departmental approval

DMS A215 Breast Sonography 1 Credit

Introduces the anatomy, physiology and pathologic conditions of breast tissue. Includes normal sonographic appearance of anatomy, sonographic findings and scanning protocols.

Registration Restrictions: Departmental approval

DMS A217 Fundamentals of Sonography Lab 1 Credit

Provides students the opportunity to apply didactic knowledge using sonographic equipment in a supervised laboratory environment.

Registration Restrictions: Departmental approval

Prerequisites: DMS A102 with a minimum grade of C and DMS A105 with a minimum grade of C and DMS A107 with a minimum grade of C and DMS A109 with a minimum grade of C.

DMS A219 Practical Sonography Lab 3 Credits

Provides students with an opportunity to apply scanning techniques in a realistic, supervised laboratory environment.

Registration Restrictions: Departmental approval

Prerequisites: DMS A217 with a minimum grade of P.

DMS A221 Pediatric Sonography 1 Credit

Introduces the anatomy, physiology and pathologic conditions for neonatal and pediatric patients. Includes normal sonographic appearance of anatomy, sonographic findings and scanning protocols.

Registration Restrictions: Departmental approval

DMS A295A Clinical Practicum I 9 Credits

Provides supervised clinical ultrasound experience in a health care facility. Students will observe, assist with and perform a variety of sonographic examinations.

Registration Restrictions: Departmental approval

Prerequisites: DMS A219 with a minimum grade of P.

DMS A295B Clinical Practicum II 9 Credits

Provides continued supervised clinical ultrasound experience in a health care facility. Students will perform a variety of sonographic examinations.

Registration Restrictions: Departmental approval

Prerequisites: DMS A295A with a minimum grade of P.

DMS A392 Pathophysiology Seminar 3 Credits

Provides continued discussion of disease pathogenesis. Includes student presentation of case studies with correlation of sonographic, clinical and other diagnostic testing information.

Registration Restrictions: Departmental approval

Prerequisites: DMS A295A with a minimum grade of P.

DMS A395 Clinical Practicum III 3 Credits

Provides continued supervised clinical ultrasound experience in a health care facility. Students will perform a variety of sonographic examinations.

Registration Restrictions: Departmental approval

Prerequisites: DMS A295B with a minimum grade of P.

Dietetics & Nutrition (DN)

Courses

DN A100 The Profession of Dietetics 1 Credit

Introduces students to the professional opportunities in the field of nutrition and dietetics with an emphasis on academic preparation, acquisition of professional credentials and career laddering.

Registration Restrictions: Course restricted to pre-dietetics and dietetics majors only.

DN A145 Child Nutrition 3 Credits

Introduces the nutritional needs and dietary recommendations for newborns, infants, toddlers, preschool and school-age children, and adolescents. Covers common childhood and adolescent conditions and corresponding nutrition interventions.

DN A151 Nutrition Through the Life Cycle 3 Credits

Introduces nutritional needs and dietary recommendations through the life cycle: newborns, infants, toddlers, preschool and school-age children, adolescents, adults and the elderly. Covers common childhood, adolescent, adult and elderly conditions and corresponding nutrition interventions.

DN A155 Survey of Alaska Native Nutrition 3 Credits

Surveys traditional foods and their role in the physical, social and mental health issues of Alaska Natives within six geo-social regions of Alaska (Arctic/Western, Interior, Aleutian Chain, Southeast, Southcentral and urban Alaska).

DN A203 Nutrition for Health Sciences 3 Credits

Studies nutrition in the life cycle including food sources and requirements of nutrients, and physiological and metabolic aspects of nutrient function. Reviews disease states, food selection, and cultural and contemporary issues of concern to health professionals.

Prerequisites: (BIOL A112 or concurrent enrollment or CHEM A104 or concurrent enrollment or CHEM A106 or concurrent enrollment).

DN A215 Sports Nutrition 3 Credits

Examines nutrition guidelines and nutrient intakes, emphasizing health and performance of physically active individuals. Includes a review of body composition and weight control.

Prerequisites: BIOL A111 with a minimum grade of C and BIOL A112 with a minimum grade of C.

DN A255 Concepts of Healthy Food 3 Credits

Explores the basics of food preparation including cooking, shopping, food handling and safety, meal management, menu writing, recipe modification and evaluation.

Prerequisites: CA A119 with a minimum grade of C or DN A203 with a minimum grade of C.

DN A260 Food Science 3 Credits

Builds on basic principles of nutrition and food preparation to study chemical, physical and mechanical properties of foods as well as reactions to temperature, technique and technology.

Prerequisites: DN A255 with a minimum grade of C.

DN A301 Nutrition Assessment 3 Credits

Explores methods of nutrition assessment in humans to evaluate dietary intake and body composition including the use of biological markers of human nutritional status.

Registration Restrictions: Complete all GER Tier 1 (basic college-level skills) courses with a minimum grade of C. Course restricted to pre-dietetics, dietetics and nutrition majors.

Prerequisites: DN A203 with a minimum grade of C and (MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C or MATH A155 with a minimum grade of C or MATH A251 with a minimum grade of C) and (PSY A111 with a minimum grade of C or SOC A101 with a minimum grade of C).

DN A311 Nutrition Counseling 1 Credit

Provides theory and practice in nutrition counseling including behavior modification techniques, processes of cognitive change and cross-cultural counseling.

Special Note: Requires access to a registered dietitian for a 16-hour practicum.

Registration Restrictions: COMM course

Prerequisites: DN A203 with a minimum grade of C and WRTG A111 with a minimum grade of C and (PSY A111 with a minimum grade of C or SOC A101 with a minimum grade of C).

DN A312 Nutrition Communication and Counseling 3 Credits

Provides theory and practice in nutrition communication and counseling including behavior modification techniques, processes of cognitive change, and cross-cultural counseling. Provides practice in nutrition education materials development and delivering nutrition education to groups.

Registration Restrictions: Complete all GER Tier 1 (basic college-level skills) courses with a minimum grade of C; declared pre-dietetics, dietetics or nutrition majors.

Prerequisites: DN A203 with a minimum grade of C and (PSY A111 with a minimum grade of C or SOC A101 with a minimum grade of C).

DN A315 World Food Patterns 3 Credits

Explores the global role of food, including therapeutic uses of food and nutrition, in humans. Examines regional and ethnic influences on food selection and preparation.

Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses with a minimum grade of C.

Prerequisites: CA A119 with a minimum grade of C or DN A203 with a minimum grade of C.

DN A325 Food & Nutrition in Modern Alaska 3 Credits

Explores the food and nutrition-related health of people in modern Alaska, ranging from Alaska Native peoples to individuals from the Pacific Islands, Middle East, Mexico, Europe, Asia and more. Examines food consumption patterns based on Alaska's diverse ethnicities, geography and economy. Also explores Alaska's unique food system.

Registration Restrictions: Junior or senior standing.

DN A350 Foodservice Systems and Quantity Foods 3 Credits

Presents principles and theories of foodservice systems; menu planning; development, standardization, adjustment and costing of quantity recipes; and procurement and production of quantity food.

Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses with a minimum grade of C. Restricted to pre-dietetics, dietetics, nutrition, and hospitality and restaurant management majors.

Prerequisites: DN A255 with a minimum grade of C.

DN A355 Weight Management and Eating Disorders 3 Credits

Analyzes the impact of obesity and eating disorders on individuals and society. Reviews etiology, incidence, socioeconomic influences, pathogenesis and treatments. Examines treatment techniques including modification of diet, activity, behavior, medication and surgery.

Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses with a minimum grade of C.

Prerequisites: DN A203 with a minimum grade of C.

DN A401 Medical Nutrition Therapy I 3 Credits

Integrates the role of Medical Nutrition Therapy into the treatment of pathological conditions. Applies the Nutrition Care Process in common medical conditions such as overweight and obesity, gastrointestinal tract disorders, cardiovascular diseases, cancer, psychiatric conditions, and pulmonary diseases.

Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses with a minimum grade of C. Restricted to dietetics majors.

Prerequisites: DN A301 with a minimum grade of C and DN A312 with a minimum grade of C and DN A430 with a minimum grade of C or concurrent enrollment.

DN A402 Medical Nutrition Therapy II 3 Credits

Continues the integration of Medical Nutrition Therapy into the treatment of pathological conditions. Applies the Nutrition Care Process in complex medical conditions such as endocrine disorders including diabetes, hepatic disorders, renal disease, immune system disorders, stress, trauma, critical illness, and neurological disorders. Also applies the Nutrition Care Process to pediatric concerns.

Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses with a minimum grade of C. Restricted to dietetics majors.

Prerequisites: DN A401 with a minimum grade of C.

DN A407 Preventive and Therapeutic Nutrition 3 Credits

Explores role of food and dietary habits in prevention and management of diseases such as disorders of the upper and lower gastrointestinal tract, diabetes, heart disease, cancer, liver diseases, renal diseases, and HIV infection. Covers medical nutrition therapy for diseases by means of alterations in food consumption.

Registration Restrictions: Complete all GER Tier 1 (basic college-level skills) courses with grade of C or better.

Prerequisites: DN A203 with a minimum grade of C.

DN A415 Community Nutrition 3 Credits

Applies nutrition principles to populations in various community environments and stages of life cycle, with consideration given to interrelated health, social, and economic concerns. Examines public policy related to nutrition concerns of target populations, and the marketing and management of community nutrition programs.

Registration Restrictions: Complete all GER Tier 1 (basic college-level skills) courses with a minimum grade of C; restricted to pre-dietetics, dietetics, nutrition, and hospitality and restaurant management majors.

Prerequisites: (DN A145 with a minimum grade of C or DN A151 with a minimum grade of C) and DN A203 with a minimum grade of C and DN A315 with a minimum grade of C.

Attributes: UAA Integrative Capstone GER.

DN A430 Research Methods in Nutrition and Dietetics 3 Credits

Presents fundamentals of research knowledge and skills in the profession of nutrition and dietetics. Addresses research designs commonly used, principles of evidence-based practice, evidence analysis procedures, translation research and outcomes research methodology.

Registration Restrictions: Complete all GER Tier 1 (basic college-level skills) courses with a minimum grade of C. Course is restricted to pre-dietetics, dietetics and nutrition majors.

Prerequisites: DN A203 with a minimum grade of C and STAT A200 with a minimum grade of C.

DN A450 Dietetic Management 3 Credits

Covers management and leadership in dietetic practice. Discusses current issues affecting practice, including human resources, outcome management, accreditation, quality assurance and entrepreneurship.

Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses with a minimum grade of C. Restricted to dietetics majors.

Prerequisites: DN A350 with a minimum grade of C.

DN A475 Advanced Nutrition 3 Credits

Presents basic concepts of the mechanisms of actions, interactions, and the processes of cellular assimilation and utilization of nutrients in humans. Emphasizes the coordinated control of nutrient utilization among the major organs.

Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses with a minimum grade of C.

Prerequisites: BIOL A111 with a minimum grade of C and BIOL A112 with a minimum grade of C and CHEM A321 with a minimum grade of C and CHEM A441 with a minimum grade of C and DN A203 with a minimum grade of C.

DN A490 Current Topics in Dietetics and Nutrition 1-6 Credits

Examines current topics in dietetics and nutrition. Choice of topics resulting from special demands of the industry or special faculty expertise.

DN A492 Senior Seminar in Dietetics 1 Credit

Requires students to apply prior learning to a practice setting. Explores current practice issues in the profession of dietetics, preparing students for supervised practice.

Special Note: May be repeated for a maximum of 2 credits.

Registration Restrictions: Dietetics majors in the final year of coursework and departmental approval

Prerequisites: DN A100 with a minimum grade of C and DN A203 with a minimum grade of C and DN A301 with a minimum grade of C and DN A350 with a minimum grade of C.

DN A601 Professional Practice in Dietetics and Nutrition 2 Credits

Prepares students to be effective dietetics and nutrition practitioners, operating with professional ethical standards and scope of practice. Trains students on health care systems within which they will work. Assists students in engaging in professional organizations for professional advancement and lifelong learning.

DN A615 Public Health Nutrition 3 Credits

Analyzes current nutritional epidemiology research and surveillance in population health. Disseminates data based on nutrition informatics and program evaluation. Engages students in critical thinking as it relates to nutrition-related policies. Integrates public health initiatives with grant writing and program planning to affect the public's health.

DN A630 Applied Research in Nutrition and Dietetics 3 Credits

Applies the critical interpretation of dietetics and nutrition research findings to professional practice. Builds on prior didactic coursework in research methodologies. Focuses on evidence-based resource development, translational research and outcomes research.

Registration Restrictions: Undergraduate or graduate level general statistics course or instructor approval

Prerequisites: STAT A200 with a minimum grade of C.

DN A641 Clinical Nutrition Assessment and Intervention 4 Credits

Students develop skills to conduct nutrition-focused history and physical exams. Examines theoretical models as the basis for behavior change and utilizes these models in assessing individuals. Addresses underlying contributors to disease. Covers the appropriate use of laboratory data and dietary supplements. Addresses specific topics in pediatric and geriatric nutrition.

DN A642 Advanced Clinical Nutrition 4 Credits

Applies nutrition assessment principles to complex health conditions. Engages students in the use of current literature and clinical practice guidelines to develop nutrition care plans incorporating principles of nutritional genomics, pharmacology, integrative and functional nutrition, and dietary supplements.

Prerequisites: DN A641.

DN A650 The Business of Dietetics 3 Credits

Examines best practices in leadership, business, management and organization in the profession of dietetics. Applies functions and principles of organization, project and risk management, and quality and performance improvement for the administration of dietetics and nutrition services in various settings.

DN A690 Selected Topics in Advanced Dietetics and Nutrition 3 Credits

Presents selected topics in advanced dietetics and nutrition. Focuses on special, emerging, current, local and other topics of interest.

Special Note: A maximum of 6 credits may be applied to the MS in Dietetics and Nutrition.

Registration Restrictions: Department approval

DN A692A Seminar: Current Issues in Dietetics Clinical and Community Nutrition 2 Credits

Seminar in current dietetics and clinical and community nutrition issues/topics intended for dietetic interns. Provides theoretical and conceptual learning along with practicum coursework necessary to meet American Dietetic Association accreditation standards and to prepare future dietitians for professional practice as Registered Dietitians.

Registration Restrictions: Bachelor's degree that satisfies didactic program in dietetics (DPD) requirements set by the American Dietetic Association. Current immunizations are required for specific internship sites.

Corequisites: DN A695C AND DN A695D.

DN A692B Seminar: Current Issues in Dietetics Community Nutrition and Foodservice Administration 1 Credit

Seminar in current dietetics, community nutrition, foodservice administration issues/topics intended for dietetic interns. Provides theoretical and conceptual learning along with practicum coursework necessary to meet American Dietetic Association accreditation standards and to prepare future dietitians for professional practice as Registered Dietitians.

Registration Restrictions: Bachelor's degree that satisfies didactic program in dietetics (DPD) requirements set by the American Dietetic Association. Current immunizations are required for specific internship sites.

Corequisites: DN A695E AND DN A695F.

DN A695C Practicum in Clinical Nutrition 4 Credits

Practicum experience in clinical nutrition for dietetic interns, necessary to meet American Dietetic Association accreditation standards and to prepare future dietitians for professional practice as Registered Dietitians.

Registration Restrictions: Bachelor's degree that satisfies didactic program in dietetics (DPD) requirements set by the American Dietetic Association. Current immunizations are required for specific internship sites.

Corequisites: DN A692A AND DN A695D.

DN A695D Practicum in Community Nutrition 2 Credits

Practicum experience in community nutrition for dietetic interns, necessary to meet American Dietetic Association accreditation standards and to prepare future dietitians for professional practice as Registered Dietitians.

Registration Restrictions: Bachelor's degree that satisfies didactic program in dietetics (DPD) requirements set by the American Dietetic Association. Current immunizations are required for specific internship sites.

Corequisites: DN A692A AND DN A695C.

DN A695E Advanced Practicum in Community Nutrition 2 Credits

Advanced practicum experience in community nutrition for dietetic interns, necessary to meet American Dietetic Association accreditation standards and to prepare future dietitians for professional practice as Registered Dietitians.

Registration Restrictions: Bachelor's degree that satisfies didactic program in dietetics (DPD) requirements set by the American Dietetic Association. Current immunizations are required for specific internship sites.

Corequisites: DN A692B AND DN A695F.

DN A695F Practicum in Foodservice Administration 4 Credits

Practicum experience in foodservice administration for dietetic interns, necessary to meet American Dietetic Association accreditation standards and to prepare future dietitians for professional practice as Registered Dietitians.

Registration Restrictions: Bachelor's degree that satisfies didactic program in dietetics (DPD) requirements set by the American Dietetic Association. Current immunizations are required for specific internship sites.

Corequisites: DN A692B AND DN A695E.

DN A698 Dietetics & Nutrition Graduate Project 1-6 Credits

The project serves as the basis for evaluating the capability of its author in the areas of applied community-based nutrition project and professional practice. The student's work is reviewed by her/his project committee to judge the author's scholarship and professional presentation and to ascertain that the student has demonstrated their knowledge and ability to receive the Master's Degree.

Registration Restrictions: Department approval

Prerequisites: DN A630 and HS A625.

DN A699 Dietetics & Nutrition Graduate Thesis 1-6 Credits

The thesis serves as the basis for evaluating the capability of its author in the areas of applied nutrition research and professional practice. The student's work is reviewed by her/his thesis committee to judge the author's scholarship and professional presentation, and to ascertain that the student has demonstrated their knowledge and ability to receive the Master's Degree.

Registration Restrictions: Department approval

Prerequisites: DN A630 and HS A625.

Disability & Long-Term Support (DLS)

Courses

DLS A200 Introduction to Children's Behavioral Health 3 Credits

Covers ethics and ethical practices, self-care, confidentiality, mandatory reporting, overview of child and adolescent development, building and maintaining therapeutic relationships, boundaries, culturally responsive interventions, resiliency, communication, and additional behavioral health topics impacting treatment outcomes for children and adolescents.

Registration Restrictions: Department approval

Crosslisted With: HUMS A200

DLS A205 Teaching Social Skills to Youth in Children's Behavioral Health 3 Credits

Promotes an understanding and application of learning theory to communication strategies, teaching methods and crisis prevention interventions.

Registration Restrictions: Department approval

Crosslisted With: HUMS A205

DLS A206 Positive Behavioral Supports in Children's Behavioral Health 3 Credits

Extends knowledge of learning theory to functional behavior assessments of problem behaviors in children (age 0-18) and appropriate interventions. Examines how to develop behavior support plans using non-aversive interventions for challenging and problematic behaviors with children.

Registration Restrictions: Department approval

Crosslisted With: HUMS A206

Prerequisites: DLS A205 or HUMS A205.

DLS A385 Working with Traumatized Children 3 Credits

Covers differentiation between types of trauma that children can experience and how trauma may affect their treatment outcomes. Examines safe and supportive trauma-informed interventions, as well as strategies to reduce the effects of caregiver fatigue.

Registration Restrictions: Department approval

Crosslisted With: HUMS A385

Prerequisites: DLS A200 or HUMS A200.

ED: Counselor Education (EDCN)

Courses

EDCN A610 Professional and Ethical Orientation to Counseling 3 Credits

Introduces the counseling profession. Includes fundamental ethical and legal issues; generic helping processes, histories, settings, roles, organizations; and credentials associated with various specialties in the field.

Registration Restrictions: Graduate standing.

EDCN A613 Human Development for Helping Professionals 3 Credits

Examines the implications of development on counseling services. Explores the major theories of human growth from birth to death in areas such as personality, cognitive, learning, social, physical, cultural, and emotional development.

Registration Restrictions: Graduate standing.

EDCN A614 Counseling Diverse Populations 3 Credits

Examines issues, concepts, and meanings of culture that impact counseling work with distinctive populations, with a focus on Alaska's context. Addresses relationships and influences among culture, education, society, and counseling.

Registration Restrictions: Graduate standing.

EDCN A616 Counseling Theories 3 Credits

Examines counseling theories from the psychodynamic, humanistic, behavioral, cognitive, and systems perspectives.

Registration Restrictions: Graduate standing.

EDCN A620 Assessment in Counseling 3 Credits

Examines the purpose, philosophy, and role of assessment in counseling. Explores topics such as psychometric concepts, diagnostic interviewing, standardized tests, and non-testing assessment methods used in school and agency settings.

Registration Restrictions: Graduate standing.

Prerequisites: EDRS A660.

EDCN A623 Counseling Skills and Techniques 3 Credits

Emphasizes developing proficiency in basic and advanced counseling skills and techniques associated with specific theories.

Registration Restrictions: Graduate standing.

Prerequisites: EDCN A610 and EDCN A616.

EDCN A624 Group Counseling 3 Credits

Examines group counseling including styles of leadership, stages of process, theoretical concepts, and common topics.

Registration Restrictions: Graduate standing.

Prerequisites: EDCN A610 and EDCN A616.

EDCN A625 Administration and Practices in School Counseling 3 Credits

Examines technological and functional skills necessary for the development and delivery of K-12 school counseling programs. Emphasizes state and national standards.

Registration Restrictions: Graduate standing.

Prerequisites: EDCN A610.

EDCN A627 Counseling in Community Agencies 3 Credits

Examines community agency counseling. Includes topics such as ethical and legal issues, crisis counseling, domestic violence, and substance abuse. Emphasizes the technological and functional skills necessary for effective work with multiple client populations.

Registration Restrictions: Graduate standing.

Prerequisites: EDCN A610.

EDCN A632 Lifespan Career Development 3 Credits

Examines the major theories of career development for clients. Explores labor market information, career development competencies, diversity, career information resources, assessment techniques, and delivery modes including educational programming.

Registration Restrictions: Graduate standing.

EDCN A633 Counseling Children and Adolescents 3 Credits

Examines counseling work with children and adolescents. Includes topics such as ethical and legal issues, theories, techniques, and high risk issues.

Registration Restrictions: Graduate standing.

EDCN A637 Treating Emotional and Mental Disorders 3 Credits

Examines essential knowledge and current research on treating mental health disorders. Analyzes the interrelationships between diagnostic assessment and documentation; the prevalence, etiology and client experience of mental disorders; and the current psychopharmacologic treatments for children and adults in school and agency settings.

Registration Restrictions: Admission to the M.Ed. in Counselor Education.

Prerequisites: EDCN A610.

EDCN A641 Counseling Military Personnel/Families 3 Credits

Examines essential knowledge and current research on counseling issues that impact military personnel and their families. Analyzes the unique concerns that affect military families through pre-, during and post-deployment, as well as significant issues for children and adults in school and agency settings.

Registration Restrictions: Departmental approval and graduate standing.

Prerequisites: EDCN A610.

EDCN A643 Grief and Trauma Counseling With Families 3 Credits

Examines essential knowledge for grief and trauma counseling with diverse family structures and cultures. Emphasizes counseling practices and explores family dynamics during the grief and trauma process. Investigates special types of loss, including trauma-causing events. Includes a personalized examination of the effects of grief on the development of a counseling orientation.

Registration Restrictions: Graduate standing

EDCN A680 Counseling Practicum 3 Credits

Provides students with an opportunity to bridge academic preparation with supervised practice in an approved setting. Involves seminar classes, direct and indirect counseling activities, and preparing for internship.

Special Note: Students must apply for placement in advance. See advisor for deadlines and procedures.

Registration Restrictions: Graduate standing and department approval required; admission to practicum.

Prerequisites: EDCN A613 and EDCN A614 and EDCN A620 and EDCN A623 and EDCN A624 and EDCN A632.

EDCN A683 Principles of Counseling Supervision 1 Credit

Examines issues related to providing clinical supervision to novice counselors through academic and experiential activities. Studies areas such as counselor development, supervision models and strategies, and legal and ethical issues.

Registration Restrictions: Departmental approval and graduate standing.

Prerequisites: EDCN A680.

EDCN A695A Counseling Internship: Advanced 1-6 Credits

Provides an advanced supervised counseling experience in an approved school or community agency setting.

Special Note: Students present and defend a portfolio that documents attainment of advanced counselor competencies. Course may not be used to fulfill elective requirements. Students must apply for placement in advance. See advisor for deadlines and procedures.

Registration Restrictions: Department approval required; admission to internship.

Prerequisites: EDCN A695C or EDCN A695E or EDCN A695S.

EDCN A695C Counseling Internship: Community Agency 3-6 Credits

Provides supervised counseling experience in an approved community agency setting.

Special Note: Students attend seminar, and present and defend a portfolio that documents attainment of counselor competencies. Course may not be used to fulfill elective requirements. Students must apply for placement in advance. See advisor for deadlines and procedures.

Registration Restrictions: Department approval required; admission to internship.

Prerequisites: EDCN A627 and EDCN A680 and EDSE A632.

EDCN A695E Counseling Internship: Elementary School 3-6 Credits

Provides supervised counseling experience in an approved elementary school setting.

Special Note: Students attend seminar, and present and defend a portfolio that documents attainment of counselor competencies. Course may not be used to fulfill elective requirements. Students must apply for placement in advance. See advisor for deadlines and procedures.

Registration Restrictions: Department approval required; admission to internship.

Prerequisites: EDCN A625 and EDCN A633 and EDCN A680 and EDSE A632.

EDCN A695F Counseling Internship: Marriage/Family 3-6 Credits

Provides supervised counseling in an approved setting that emphasizes marriage and/or family counseling.

Special Note: Students must apply for placement in advance. Students are expected to have adequate academic preparation in family counseling. See advisor for deadlines and procedures.

Registration Restrictions: Graduate standing, department approval and admission to internship.

Prerequisites: EDCN A627 and EDCN A637 and EDCN A680 and EDSE A632.

EDCN A695S Counseling Internship: Secondary School 3-6 Credits

Provides supervised counseling experience in an approved secondary school setting.

Special Note: Students attend seminar, and present and defend a portfolio that documents attainment of counselor competencies. Course may not be used to fulfill elective requirements. Students must apply for placement in advance. See advisor for deadlines and procedures.

Registration Restrictions: Department approval required; admission to internship.

Prerequisites: EDCN A625 and EDCN A633 and EDCN A680 and EDSE A632.

ED: Early Childhood (EDEC)

Courses

EDEC A100 Fundamentals of Early Childhood Practice 3 Credits

Addresses essential practical elements and commonly accepted standards of safe, healthy, competent care for young children.

EDEC A105 Introduction to the Field of Early Childhood Education 3 Credits

Survey of historical, social, and philosophical foundations of the field of early childhood education. Core topics include developmentally appropriate practices, observation and documentation, survey of types of early childhood settings, research-based practices, ethics, and professionalism.

Special Note: Requires up to 15 hours of field observation.

Attributes: UAA Social Sciences GER.

EDEC A106 Creativity and the Arts in Early Childhood 3 Credits

Explores creativity and culturally-rich, art-integrated curriculum in Early Childhood classrooms. Promotes innovative and collaborative practices that highlight ways to connect one's personal identity and build connections to place and culture.

Special Note: This course requires 15 hours of field experience.

EDEC A201 Early Childhood Practitioner Roles and Responsibilities 2 Credits

Focuses on the diverse roles of the early childhood practitioner, with an emphasis on self-analysis, ethical conduct, reflection and ongoing professional growth.

Prerequisites: EDEC A105 with a minimum grade of C and EDEC A106 with a minimum grade of C.

EDEC A206 Integrated Curriculum for Young Children 3 Credits

Examines early childhood integrated curriculum models to implement with young children. Explores interest-based, developmentally appropriate and standards-based curriculum.

Special Note: 30 lab hours are required.

Prerequisites: EDEC A105 with a minimum grade of C and EDEC A106 with a minimum grade of C.

EDEC A210 Guiding Young Children 3 Credits

Examines the learning principles relevant to guidance of young children. Introduces the social, emotional, and intellectual development of young children and examines implications for effective child guidance and motivation in the classroom.

Prerequisites: EDEC A105 with a minimum grade of C and (EDSE A212 with a minimum grade of C or PSY A365 with a minimum grade of C).

EDEC A241 Infant and Toddler Development 3 Credits

Examines the development of infants and toddlers, infant and toddler care programs, the roles of caregivers and their relationships with families. Emphasizes cognitive, language, social, emotional, motor development and the importance of relationships in the care and education of infants and toddlers.

Special Note: Requires observation hours.

Registration Restrictions: Admission to the College of Arts and Sciences School of Education

Prerequisites: EDEC A105 with a minimum grade of C and (EDSE A212 with a minimum grade of C or PSY A150 with a minimum grade of C or PSY A365 with a minimum grade of C).

EDEC A242 Family and Community Partnerships 3 Credits

Examines the importance and complexity of children's families and communities. The course explores programs that support family-centered principles underlying program planning, implementation, and relationship building.

Prerequisites: EDEC A105 or EDFN A101 or EDSE A212 or PSY A365.

EDEC A292 Early Childhood Practicum Seminar 3 Credits

Capstone seminar provides an opportunity for the exchange of ideas and experiences during the practicum field placement. Students discuss and evaluate developmentally appropriate practices and reflect on ethics and professionalism using the NAEYC Professional Preparation Standards and Code of Ethical Conduct.

Registration Restrictions: Must be admitted to practicum and to AAS in Early Childhood Development.

Corequisites: EDEC A295.

EDEC A295 Early Childhood Practicum 3 Credits

Supervised field experience in early childhood classroom. Students develop, implement and evaluate elements of a comprehensive, developmentally appropriate curriculum and learning environment.

Special Note: Requires 150 hours of field experience.

Registration Restrictions: Departmental approval, admission to practicum and AAS Early Childhood Development

Corequisites: EDEC A292.

EDEC A303 Young Children in Inclusive Settings 3 Credits

Examines the principles, issues and concepts of inclusive teaching practices to support young children from birth through age eight. Focuses on research-based inclusive practices for young children with disabilities and those from diverse cultural and linguistic backgrounds.

Special Note: Requires up to 15 hours of classroom observation.

Prerequisites: EDEC A242 with a minimum grade of C and (EDEC A206 with a minimum grade of C or EDEL A206 with a minimum grade of C).

EDEC A310 A Developmental Approach to Assessment in Early Childhood Education 3 Credits

Examines a developmental approach to assessment for instructional and developmental planning with birth to age 8 populations, with an emphasis on multi-tiered models of support. Topics include authentic assessment, screening, progress monitoring, and formal and informal diagnostic assessments with application to cultural and linguistically diverse populations.

Special Note: Requires 15 hours of field experience.

Registration Restrictions: Departmental approval and admission to Bachelor of Arts in Early Childhood Education

Prerequisites: EDEC A210 with a minimum grade of C and EDEC A241 with a minimum grade of C.

EDEC A403 Mathematics and Science in Early Childhood 3 Credits

Examines the principles, developmental concepts, and curricula designed to promote science and mathematics concepts. Analyzes how young children develop mathematical and scientific thinking. Covers the methods of teaching mathematics and science to young children.

Special Note: Field experience is completed in conjunction with EDEC A495E.

Registration Restrictions: Department approval, admission to advanced practicum for early childhood education and the College of Arts and Sciences School of Education

Prerequisites: EDEC A206 with a minimum grade of C and EDEC A210 with a minimum grade of C and MATH A211 with a minimum grade of C and MATH A212 with a minimum grade of C.

EDEC A404 Literacy for Young Children 3 Credits

Examines the principles of language and literacy development. Covers oral and written discourse as they relate to the development of methods, materials, and philosophy of literacy learning.

Special Note: A field experience is part of this course in conjunction with EDEC A495E.

Registration Restrictions: Department approval, admission to advanced practicum in early childhood education and the College of Arts and Sciences School of Education

Prerequisites: EDEC A206 with a minimum grade of C and EDEC A210 with a minimum grade of C and EDFN A301 with a minimum grade of C.

EDEC A407 Action Research Using Observation and Documentation 3 Credits

Examines the process of observation and documentation as a means to understand and make visible children's learning. Focuses on the observation and documentation process as a cycle of inquiry. Emphasizes the main components of action research, including the identification of a need in a class setting, the development of an action plan, data collection and analysis from field observation notes, and the formulation of a research report with implications and recommendations for students' future teaching practice.

Special Note: 30 lab hours are required. Not available for credit to students who have completed EDEC A607.

Registration Restrictions: Admission to the College of Arts and Sciences School of Education

May Be Stacked With: EDEC A607

Prerequisites: EDEC A310 with a minimum grade of C.

EDEC A408 Children's Literature: Early Childhood Years 3 Credits

Explores a variety of children's literature with emphasis on helping pre-service teachers select, interpret and use quality literature with young children.

Special Note: Not available for credit to students who have completed EDEC A608.

May Be Stacked With: EDEC A608

Prerequisites: EDSE A212 with a minimum grade of C or PSY A365 with a minimum grade of C or EDFN A301 with a minimum grade of C.

EDEC A492 Early Childhood Seminar 1 Credit

Seminar enhances the internship teaching experience by creating situations in which the intern will integrate theoretical knowledge from previous education courses with the classroom experiences.

Registration Restrictions: Departmental approval; admission to internship.

Corequisites: EDEC A495.

EDEC A492E Early Childhood Advanced Practicum Seminar 1 Credit

Enhances the advanced practicum teaching experience, which is taken in conjunction with EDEC A495E, by creating situations in which students will integrate theoretical knowledge from previous courses and experiences encountered in classroom settings.

Registration Restrictions: Department approval, admission to advanced practicum in early childhood education and the College of Arts and Sciences School of Education

Prerequisites: EDEC A208 with a minimum grade of C and EDEC A210 with a minimum grade of C.

EDEC A492I Early Childhood Internship Seminar 1 Credit

Enhances the teaching internship by creating situations in which interns will integrate theoretical knowledge from previous education courses with experiences encountered in a classroom setting.

Registration Restrictions: Admission to College of Arts and Sciences School of Education early childhood student teaching internship

Prerequisites: EDEC A492E and EDEC A495E.

Corequisites: EDEC A495I.

EDEC A495 Early Childhood Internship 3-9 Credits

Supervised internship in early childhood classroom. Allows for application of theoretical concepts and principles in the early childhood classroom environment. Emphasizes curriculum instruction, planning, assessment, reflection, classroom management, and professionalism skills for the field.

Special Note: Completion of 12 credits required for degree and certification.

Registration Restrictions: Departmental approval; admission to internship.

Corequisites: EDEC A492.

EDEC A495E Early Childhood Advanced Practicum 3 Credits

Supervised advanced practicum in early childhood classrooms. Allows for application of theoretical concepts and principles and emphasizes curriculum instruction, planning, assessment, reflection, classroom management, and professional skills for the field. Students are expected to engage in reflective practice while working with a peer at their site.

Registration Restrictions: Department approval, admission to advanced practicum in early childhood education and the College of Arts and Sciences School of Education

Prerequisites: EDEC A206 with a minimum grade of C and EDEC A210 with a minimum grade of C.

EDEC A495I Early Childhood Internship 9 Credits

Supervised internship in early childhood classrooms. Allows for application of theoretical concepts and principles in the early childhood classroom environment. Emphasizes classroom management, curriculum instruction, planning, assessment, reflection and professional skills for the field.

Registration Restrictions: Admission to College of Arts and Sciences School of Education early childhood student teaching internship

Prerequisites: EDEC A492E and EDEC A495E.

Corequisites: EDEC A492I.

EDEC A607 Observation and Documentation: Inquiry in Action 3 Credits

Examines the process of observation and documentation as a means to understand and make visible children's learning. Focuses on the observation and documentation process as a cycle of inquiry as well as formal and informal assessment systems. Applies knowledge of observation and documentation to produce a professional artifact that contributes to the field.

Special Note: Requires a 30 hour practicum. Not available for credit to students who have completed EDEC A407.

Registration Restrictions: Graduate standing

May Be Stacked With: EDEC A407

EDEC A608 Analysis of Children's Literature: Early Childhood Years 3 Credits

Intensive study of various genres of children's literature. Analyzes and critiques major historical and contemporary works of children's literature for use in classrooms while selecting, interpreting, and using quality literature with young children.

Special Note: Not available for credit to students who have completed EDEC A408.

Registration Restrictions: Graduate standing

May Be Stacked With: EDEC A408

ED: Ed Dev & Leadership (EDL)

Courses

EDL A493 Implementing Alaska Native Values into the Classroom or Work Place 3 Credits

Examine Alaska Native Traditional values as holistic approaches to life and work. Reflect on values as they pertain to academic, professional and personal experiences in modern life. Explore the thematic framework of "modern Qasgiq" (an ancient indigenous communal training and learning center). Identify ways of healing and wellness as a critical concept through different worldviews as one adapts and adjusts by embracing ancestral healing and wellness rights passed on by elders and ancestors through resiliency of Alaska Native language and/or culture.

EDL A610 Orientation to Graduate Studies in Leadership 2 Credits

Provides an orientation to the scholar-practitioner model of study in the Educational Leadership Program. The orientation provides an overview of the knowledge, skills and dispositions for successful school leadership. These areas include leadership traits, writing skills and research skills, awareness of the Alaskan Administrator Standards, Educational Leadership Constituent Consortium Standards, Cultural Standards for Alaska, and International Society of Technology Educators Standards.

Registration Restrictions: Admission to EDL program and graduate standing

EDL A620 Leadership in Alaska Culture and Social Justice Issues 3 Credits

Examines cultural proficiency from personal and professional perspectives. Reflects on the effects of historical trauma of Alaska Natives in rural and urban settings. Explores educational leadership strategies to support culturally responsive practices and social justice.

Registration Restrictions: Admission to College of Arts and Sciences School of Education

EDL A637 Organizational Theory and Change 3 Credits

Examines organizational theories and leadership styles that drive organization transformation. Explores the complexity of change and its impact on organizational culture and cumulative impact on the organization's success. Emphasizes the foundation of social justice as an organizational response to diverse communities.

Registration Restrictions: Admission to the College of Arts and Sciences School of Education and graduate standing, instructor approval required if prerequisite is not met.

Prerequisites: EDL A610.

EDL A638 Instructional Leadership and Student Learning 3 Credits

Examines instructional leadership and how it impacts the operations of the school and the district. Innovative approaches to instructional leadership in K-12 schools, with attention to problems of curriculum development and assessment of student learning in a culturally relevant environment, school reform models and the design and implementation of school improvement programs.

Registration Restrictions: Admission to the College of Arts and Sciences School of Education and graduate standing.

Prerequisites: EDL A610.

EDL A639 Politics, Law and Ethics in Leadership 3 Credits

Examines knowledge and skills required for implementing political, legal and ethical practices within an educational setting. Analyzes legal and policy issues and politics impacting public education. Integrates professional practice standards, school board policies and regulations, and constitutional, statutory, and case law.

Registration Restrictions: Graduate standing and admission to College of Arts and Sciences School of Education

Prerequisites: EDL A610.

EDL A640 Law and Ethics in Education 3 Credits

Knowledge and skills for developing professionally-sound legal and ethical practices in school settings. Legal issues that impact the organization and delivery of public education, including professional practice commissions standards and constitutional, statutory, administrative, and case law.

EDL A644 School Resource Allocation and Management 3 Credits

Examines the school administrator's role and responsibility in the operational responsibilities of effective school leadership. Explores major leadership responsibilities related to student support services, supervision and evaluation, finance and budgeting, and maintaining school buildings and grounds.

Prerequisites: EDL A610 and EDL A637 and EDL A638.

EDL A651 Educator Supervision and Evaluation 3 Credits

Examines the school principal's role in the supervision and evaluation of educators. Analyzes research-based strategies to improve instruction and student learning within a culture of trust. Develops an in-depth knowledge of the evaluation process and how it interfaces with supervision. Emphasizes compliance with State of Alaska regulations for educator evaluation.

Registration Restrictions: Graduate standing and admission to College of Arts and Sciences School of Education

Prerequisites: EDL A610.

EDL A671 Superintendent Stewardship and Systemic Change 3 Credits

Role of superintendent as the steward of the entire school system and the leader responsible for improving student learning through public accountability measures.

Registration Restrictions: Master's degree.

EDL A672 Student Performance: Academic and Developmental 3 Credits

Focus on the superintendent's need to understand developmental research that explains student academic performance including the psycho-social, physiological, and cultural dimensions.

Registration Restrictions: Master's degree.

EDL A673 Human Resource Management and Labor Relations 3 Credits

Tools and approaches that enable superintendents to manage personnel and negotiation transactions within a school district.

Registration Restrictions: Master's degree.

EDL A674 Public School Finance and Facilities 3 Credits

Key components of K-12 public school finance and K-12 facility design and maintenance as they relate to the preparation of superintendents.

Registration Restrictions: Master's degree.

EDL A675 Superintendent Internship 3-6 Credits

Fieldwork in an appropriate educational or agency setting. Assignment will be respective to the superintendency.

Special Note: May be repeated for a maximum of 6 credits.

Registration Restrictions: Admission to the Ed Leadership Superintendent program and completion of any two of EDL A671, EDL A672, EDL A673 and EDL A674.

Prerequisites: EDL A676 or concurrent enrollment or EDL A677 or concurrent enrollment.

EDL A676 Superintendent Seminar I 3 Credits

Themes of policy development and implementation, school- community relations, and instructional reform with a focus on state and local events and issues. Supplements EDL A675. Provides opportunity to interns for structured reflection and added input.

Registration Restrictions: Admission to the Ed Leadership Superintendent program and completion of any two of EDL A671, EDL A672, EDL A673 and EDL A674.

Corequisites: EDL A675.

EDL A677 Superintendent Seminar II 3 Credits

Themes of policy development and implementation, human resource management, and district level finance and facilities management. Supplements EDL A675. Provides opportunity to interns for structured reflection and added input.

Registration Restrictions: Admission to the Ed Leadership Superintendent program and completion of any two of EDL A671, EDL A672, EDL A673 and EDL A674.

Corequisites: EDL A675.

EDL A692A Principal Seminar I 3 Credits

Provides structured discussions, reflections and presentations of internship topics in a seminar setting. Facilitates the application of theory to practice through the internship field work with an emphasis in school and community relations and public school facilities. Promotes professional networking with current administrators.

Registration Restrictions: Graduate standing in College of Arts and Sciences School of Education

Corequisites: EDL A695.

EDL A692B Principal Seminar II 3 Credits

Provides structured discussions, reflections and presentations of internship topics in a seminar setting. Facilitates the application of theory to practice through the internship fieldwork with an emphasis in human and fiscal resource management and instructional leadership.

Registration Restrictions: Graduate standing in the College of Arts and Sciences School of Education and admittance to the EDL principal internship program

Prerequisites: EDL A692A.

Corequisites: EDL A695.

EDL A695 Principal Internship 3-6 Credits

Provides structured and supervised fieldwork in a K-12 public education setting. Integration of theory into practice through the demonstration of leadership in authentic principal responsibilities.

Special Note: This course operates in accordance with the K-12 administrator calendar, not the university academic year calendar. Mentors are arranged in collaboration with districts. The internship is supervised by the School of Education.

Registration Restrictions: Graduate standing in the College of Arts and Sciences School of Education and admission into the EDL Principal Internship.

Corequisites: EDL A692A AND EDL A692B.

ED: Educational Technology (EDET)

Courses

EDET A637 Design of e-Learning 3 Credits

Develops effective instructional methods for learners in web-based learning environments.

Registration Restrictions: Graduate standing.

ED: Elementary Education (EDEL)

Courses

EDEL A205 Becoming an Elementary Teacher 3 Credits

Introduction to field of elementary education and the process of becoming a reflective elementary teacher. Overview of core topics, including learning theories, a critical review of motivation theories, observation strategies, communicating with children, and teaching and learning in sociocultural context.

Special Note: Requires a 20-hour field assignment that must be arranged by the College of Education. Partners may limit registration.

Prerequisites: EDFN A101 with a minimum grade of C and (WRTG A111 with a minimum grade of C or WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C or ENGL A311 with a minimum grade of C or ENGL A312 with a minimum grade of C or ENGL A414 with a minimum grade of C).

EDEL A206 Introduction to Assessment in Elementary Education 2 Credits

Introduction to assessment and the rationale for using assessments to guide instruction. Overview of purposes and types of assessments including data interpretation and reporting strategies.

Prerequisites: EDEC A105 or concurrent enrollment or EDEL A205 or concurrent enrollment or EDFN A101 or concurrent enrollment.

EDEL A325 Teaching Literacy in Elementary Schools 6 Credits

Survey of current issues and trends in teaching literacy in grades K-6. Focuses on methods, materials and practices that develop children's proficiency in reading, writing and oral language.

Registration Restrictions: Admission to Department of Teaching and Learning.

Prerequisites: EDFN A301.

Corequisites: EDEL A327 AND EDEL A395.

EDEL A327 Teaching Social Studies in Elementary Schools 3 Credits

Covers methodology and materials used in elementary social studies classrooms. Reviews current research regarding K-6 student learning and conceptual development in social studies and corresponding pedagogies. Examines content selection, assessment and curriculum design within a culturally responsive framework.

Registration Restrictions: Department approval

EDEL A395 Elementary Education Practicum I: Literacy and Social Studies 2 Credits

Supervised practicum in a K-6 education facility. Supports development of knowledge and skills in teaching literacy and social studies in elementary classrooms.

Special Note: Field experiences will be arranged and supervised by the School of Education. Partners may limit registration.

Registration Restrictions: Admission to Department of Teaching and Learning.

Prerequisites: EDFN A301.

Corequisites: EDEL A325 AND EDEL A327.

EDEL A426 Teaching Mathematics in Elementary Schools 3 Credits

Methodology and materials used in the elementary mathematics classroom. Focuses on the mathematics topics typically taught in elementary schools and research-based methods for teaching children.

Registration Restrictions: Admission to Department of Teaching and Learning.

Prerequisites: EDEL A395.

Corequisites: EDEL A428 AND EDEL A492A AND EDEL A495A.

EDEL A428 Teaching Science in Elementary Schools 3 Credits

An inquiry-based approach to teaching science in linguistically, culturally and socioeconomically diverse K-6 classrooms.

Registration Restrictions: Department approval

Prerequisites: EDEL A395 with a minimum grade of C.

Corequisites: EDEL A426 AND EDEL A492A AND EDEL A495A.

EDEL A492A Elementary Education Seminar II: Learning Environment 2 Credits

Integrates theoretical knowledge of learning environments and classroom management with elementary classroom experiences.

Special Note: This course operates in accordance with the K-12 school year calendar, not the university academic year calendar.

Registration Restrictions: Admission to Department of Teaching and Learning.

Prerequisites: EDEL A395.

Corequisites: EDEL A426 AND EDEL A428 AND EDEL A495A.

EDEL A492B Elementary Education Seminar III: Teaching Capstone 3 Credits

Integrates theoretical knowledge from previous education courses with the internship experience.

Special Note: This course operates in accordance with the K-12 school year calendar, not the university academic year calendar.

Registration Restrictions: Admission to internship.

Corequisites: EDEL A495B.

EDEL A495A Elementary Education Practicum II: Learning Environment, Mathematics, Science **3 Credits**

Supervised practicum in a K-6 educational facility. Supports development of proficiencies in creating an inclusive, engaging learning environment and teaching mathematics and science.

Special Note: This course operates in accordance with the K-12 school year calendar, not the university academic year calendar. Placement must be arranged and supervised by the College of Education. Partners may limit registration.

Registration Restrictions: Admission to Department of Teaching and Learning.

Prerequisites: EDEL A395.

Corequisites: EDEL A426 AND EDEL A428 AND EDEL A492A.

EDEL A495B Elementary Education Internship **6-9 Credits**

Supervised internship in a K-6 educational facility. Internship extends teaching proficiency developed in Practicum I and II. Emphasizes application of Alaska Beginning Teaching Standards in professional practice.

Special Note: This course operates in accordance with the K-12 school year calendar, not the university academic year calendar. Placement must be arranged and supervised by the School of Education. Partners may limit registration.

Registration Restrictions: Admission to internship.

Corequisites: EDEL A492B.

ED: Engaged Leadership (EDEN)

Courses

EDEN A600 Education, Culture and Leadership Residency **4 Credits**

Critical analysis of the underlying issues within contemporary educational policies, practices and theories as connected to the Alaska context in urban, rural and diverse settings. Exploration about role of social justice, culturally responsive practices, innovations, and inquiries in personal and professional settings.

Registration Restrictions: Graduate standing and admission to College of Arts and Sciences School of Education

EDEN A601 Inquiry-Based Scholarship: Quantitative, Qualitative, Mixed-Modes I **3 Credits**

Inquiry-based scholarship that focuses on planning and production of student-initiated and -developed research. Examines qualitative, quantitative and mixed-method research methodologies with an emphasis on inquiry in action research, evaluation and data-informed decision making. Begins the transition from experienced practitioners to scholar-practitioners with refined skills to read, understand, analyze, write and evaluate various kinds of research and scholarship.

Registration Restrictions: Graduate standing and admission to College of Arts and Sciences School of Education

Prerequisites: EDEN A600.

EDEN A602 Inquiry-Based Scholarship: Quantitative, Qualitative, Mixed-Modes II **3 Credits**

Advanced inquiry-based research methodologies that utilize qualitative, quantitative or mixed-method inquiry in action research, evaluation and data-informed decision making. Supports the transition from being experienced practitioners to scholar-practitioners, with refined skills in reading, understanding, analyzing and evaluating educational research and scholarship used to support educational practice.

Registration Restrictions: Graduate standing and admission to College of Arts and Sciences School of Education

Prerequisites: EDEN A600 with a minimum grade of B and EDEN A601 with a minimum grade of B.

EDEN A611 Engaged Leadership: Ethics and Stewardship **3 Credits**

Examines ethical considerations in organizational decision making and practice. Emphasizes stewardship as a personal obligation for engaged leaders who foster the well-being of individuals, the organization and society. Builds understanding of the behaviors that facilitate effective leadership in organizations.

Registration Restrictions: Admission to doctoral program

Prerequisites: EDEN A600.

EDEN A612 Indigenous Epistemologies in Alaska **3 Credits**

Examination, analysis and application of indigenous knowledge systems with a focus on Alaska Native epistemologies.

Registration Restrictions: Graduate standing and admission to the College of Arts and Sciences School of Education

Prerequisites: EDEN A600 and EDEN A601 and EDEN A602.

EDEN A613 Leading Change and Innovation **3 Credits**

Analyzes and evaluates current research on the adoption and implementation of theories of organizational change. Applies a specific focus on the role of leaders in engaging organizations effectively in adaptive and innovative approaches.

Registration Restrictions: Admission to doctoral program

Prerequisites: EDEN A600.

EDEN A615 Law, Policy and Advocacy **3 Credits**

Examines the nature of policy and the policy-making process in relation to public entities, private enterprise and stakeholder groups. Examines legal and advocacy issues through a study of Alaska's policies and changing needs.

Registration Restrictions: Admission to doctoral program

Prerequisites: EDEN A600.

EDEN A616 Building Responsive Organizational Capacity **3 Credits**

Prepares learners to advance organizations through shared leadership and collaborative inquiry. Deepens foundational knowledge pertaining to use of human and fiscal resources in structuring sustainable, ecological models for organizations. Implements a systems approach for linking fiscal resources to development of human and social capital.

Registration Restrictions: Admission to doctoral program

Prerequisites: EDEN A600.

EDEN A617 Engaging Communities **3 Credits**

Explores roles and responsibilities of leaders in engaging communities in critical inquiry, linking current concerns to problem solving, community building, leadership development and action.

Registration Restrictions: Admission to doctoral program

Prerequisites: EDEN A600.

EDEN A690 Current Topics in Engaged Leadership **1-3 Credits**

Explores current issues, topics and trends in engaged leadership.

Special Note: May be repeated twice with a change of subtitle for a maximum of 3 credits.

Registration Restrictions: Admission to doctoral program

Prerequisites: EDEN A600.

EDEN A695 Internship in Engaged Leadership **1-3 Credits**

Internship in an approved organizational setting.

Registration Restrictions: Admission to doctoral program and advisor approval

Prerequisites: EDEN A600.

ED: Foundations (EDFN)

Courses

EDFN A101 Introduction to Education **3 Credits**

Introduces education as a possible career choice. Covers the history of American education, an examination of contemporary issues in education, and basic classroom observational techniques. Students self-assess personal profile against characteristics of effective teachers. Course includes ten hours of field experience in a P-12 setting and may require a background check.

EDFN A210 Assessment-Based Online Tutoring **2 Credits**

Focuses on culturally responsive pedagogy and analysis and application of student achievement data to inform lesson planning and tutoring sessions. Emphasizes discussion and reflection on assessment data as it relates to online tutoring in a P-6 environment.

Prerequisites: EDEC A105 with a minimum grade of C or concurrent enrollment or EDEL A205 with a minimum grade of C or concurrent enrollment or EDFN A101 with a minimum grade of C or concurrent enrollment.

EDFN A300 Philosophical and Social Context of American Education **3 Credits**

Explores significant educational movements, theories, and research related to educational philosophy, sociology, and history to develop a framework for professional educational practice. Course emphasizes the importance of developing a coherent philosophy to guide teaching practice in a culturally diverse and inclusive classroom.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing. Departmental approval.

Prerequisites: EDSE A212 or concurrent enrollment or PSY A365 or concurrent enrollment.

Attributes: UAA Integrative Capstone GER.

EDFN A301 Foundations of Literacy and Language Development **3 Credits**

Explores how children learn oral and written language. Examines language development and considers how culture, second language learning, and dialect influence these processes. Integrates structure of language and its application to the development and assessment of literacy.

Special Note: Outside class work includes a minimum of 30 hours of field experience as part of course assignments. Field placement must be arranged by the School of Education. Partners may limit registration.

Registration Restrictions: Admission to Department of Teaching and Learning.

EDFN A302 Foundations of Educational Technology **3 Credits**

Presents skills and strategies needed to integrate technology into teaching and learning. Provides overview of issues, pedagogies, tools and skills needed to guide the effective use of technology with children. Supports appropriate use of technology in education.

Registration Restrictions: Admission to the Department of Teaching and Learning.

Prerequisites: EDSE A212 with a minimum grade of C or PSY A365 with a minimum grade of C.

EDFN A304 Comparative Education **3 Credits**

Compares P-12 educational systems and issues across nations and regions, focusing on case examples representing diverse cultural, historical, and political contexts. Examines theories in comparative education; purposes of schooling; socio-cultural contexts of education; policy, curricular, and pedagogical responses to diversity issues; and organizational and structural issues.

Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses and junior standing.

Attributes: UAA Integrative Capstone GER.

EDFN A478 Issues in Alaska Native Education, K-12 **3 Credits**

History of Alaska education and current education policy with a focus on issues in Alaska Native education. Includes the study of the Alaska environment as well as the social, economic and political history of Alaska from the perspective of both Alaska Native people and immigrant residents.

Special Note: This course meets the Alaska Department of Education and Early Development Alaska Studies requirement for state certification.

Registration Restrictions: Departmental approval

EDFN A487 Field Experiences: Teacher Education **1-11 Credits**

Field experiences in public school classrooms. Includes elementary, secondary, and physical education programs. Students gain practical experience in classroom settings. Assignments must be arranged through the College of Education.

Registration Restrictions: Departmental approval required.

EDFN A601 Educational Philosophy, History and Sociology **3 Credits**

Examines significant educational philosophies, historical periods, and complex sociocultural, political and policy forces that have influenced and continue to shape education. Analyzes major educational reform efforts. Explores belief systems, values, worldviews and philosophy within the context of school experiences. Encourages self-assessment and reflection with the goal of improving professional teaching practice.

Registration Restrictions: Graduate standing

EDFN A602 Foundations: Educational Psychology **2 Credits**

Examines significant educational movements, theories, and research in the areas of educational psychology. Develops a framework for professional practice. Includes study of theory, development, pedagogy, and instructional practice. Focus is on the teacher's role and responsibility in lesson development, curriculum design, instructional methods, and integration of relevant educational psychology.

Registration Restrictions: Departmental approval required.

EDFN A603 Foundations: Educational History and Sociology 2 Credits

Examines significant educational historical periods. Explores how the current social, political, and policy forces came into existence and how they influence the day-to-day environment of today's teacher. Includes the development of belief system and worldview through examining key school experiences. Major educational reform efforts will be analyzed.

Registration Restrictions: Departmental approval required.

EDFN A621 Culture, Language and Literacy 3 Credits

Examination of the theoretical underpinnings of bilingual/cross-cultural and English as a second language (ESL) education as they apply to literacy issues. Special attention is given to research findings on first and second language acquisition and subsequent implications for the teaching of reading and writing.

Registration Restrictions: Graduate standing in the College of Education

EDFN A622 Philosophy of Education 3 Credits

Basic philosophic concepts and their historical development; philosophy applied to education and related issues and problems; examination of contributions of outstanding educators.

Registration Restrictions: Graduate standing in the College of Education.

EDFN A631 Advanced Educational Psychology 3 Credits

Human emotional, mental, physical and social development. Emphasis on individual differences. Assumes one previous course in human development, educational psychology, and teaching experience.

Registration Restrictions: Graduate standing in the College of Education.

EDFN A636 Innovations in Teaching and Learning 3 Credits

Significant and emerging theories of teaching and learning. Reviews current educational reform efforts and examines the research base of each initiative to assess potential effectiveness.

EDFN A641 Place, Culture and Responsibility 3 Credits

Immerses students in local heritage, culture, landscapes, opportunities and experiences as the foundation for the study of interdisciplinary learning and curriculum. Emphasizes place-based learning through participation in community advocacy and activism.

Registration Restrictions: Graduate standing in the College of Arts and Sciences School of Education and department approval

EDFN A645 Culturally Sustaining Literacy for P-6 English Language Learners 3 Credits

Examines how children learn language and become literate in their first and subsequent languages. Integrates structure of language and its application to the development and assessment of language and literacy for English language learners including Alaska Native populations. Explores implications of culturally sustaining pedagogy on academic literacy practices.

Registration Restrictions: Department approval and admission to the Language Education Graduate Certificate program.

EDFN A646 Culturally Sustaining Instruction in Science, Technology Engineering, Arts and Mathematics (STEAM) f 3 Credits

Focus on assessment and science inquiry methods to promote science literacy and academic English proficiency for linguistically diverse students (including Alaska Native populations). Both Alaska Native and Western ways of knowing about the environment are addressed throughout this course. Discusses the cognitive academic language demands of school science. Integrates research-based science teaching strategies for supporting academic language development, including reading, writing, oral language, and auditory comprehension skills.

Registration Restrictions: Department approval and admission to the Language Education Graduate Certificate program

Prerequisites: EDSY A668.

Corequisites: EDFN A689.

EDFN A647 Developing Literacies Across the K-12 Continuum 1 Credit

Analysis and evaluation of current learning theory, models, and best practices for developing literacies, including visual, literary, and performing arts, in order to design appropriate pedagogy across the K-12 continuum.

Registration Restrictions: Departmental approval required.

Prerequisites: EDFN A478 and EDFN A602.

EDFN A649 Capstone Seminar: Inquiry in Teaching and Learning 2 Credits

Sharing, analysis, reflection, and presentation of theory-based classroom inquiry conducted during the MAT program. Interns will self-assess their classroom experiences and develop their educational philosophies in light of standards, research, and current educational trends and perspectives.

Registration Restrictions: Departmental approval required.

EDFN A654 Brain, Mind, and Education 3 Credits

Critically examines research from various fields including neurobiology and psychology. Students will evaluate the research for potential implications for and applications to educational settings.

Registration Restrictions: Graduate standing.

EDFN A670 Current Topics in Education 1-3 Credits

Study of specific current issues, techniques and trends affecting educators.

Special Note: May be repeated for credit with a change of subtitle. Restricted enrollment may apply; see advisor for applicability to degree program.

Registration Restrictions: Faculty permission.

EDFN A689 Action Research Experience: Culturally Sustaining Pedagogy for English Language Learners in P-6 Clas 1-6 Credits

Action research project in P-6 classroom to support the development of academic language proficiency and culturally sustaining pedagogy with an emphasis on theory-based inquiry into teaching and learning with English language learners and Alaska Native children.

Registration Restrictions: Department approval and admission to the Language Education Graduate Certificate program

Prerequisites: EDSY A668.

Corequisites: EDFN A646.

EDFN A691 Current Topics in Second Language Education 1-3 Credits

Focuses on second-language education, based on current research and first-hand experience from successful, established programs. Intended for administrators; early-childhood, elementary, secondary modern language or ESL teachers; and others planning to implement a second-language education program or currently participating in an established program.

Registration Restrictions: Graduate standing; basic fluency in a second language desirable.

EDFN A695 Internship 1-9 Credits

Supervised internship in a K-12 public school. Includes periodic on-campus seminars that emphasize theory-based inquiry into teaching and learning.

Special Note: This course operates in accordance with the K-12 school year calendar, not the university academic year calendar. Placement is arranged and supervised by the university in partnership with staff from the public school site. Partners may limit registration. Completion of 9 credits is required for the MAT.

Registration Restrictions: Departmental approval

Prerequisites: EDFN A601 with a minimum grade of C and EDFN A602 with a minimum grade of C and EDFN A603 with a minimum grade of C.

EDFN A698 Individual Research 1-6 Credits

As directed by graduate committee.

Registration Restrictions: Faculty permission.

EDFN A699 Thesis 1-6 Credits

As directed by graduate committee.

Registration Restrictions: Faculty permission.

ED: Research (EDRS)

Courses

EDRS A660 Fundamentals of Research in Education 3 Credits

Examines fundamentals in education research. Reviews, analyzes and evaluates research to enhance knowledge of and skills in conducting educational research. Provides foundation for additional research courses.

Registration Restrictions: Graduate standing or instructor permission

EDRS A661 Data-Informed Instruction and Decision Making 3 Credits

Focuses on the educators' or service providers' understanding, analysis, and application of data related to (1) student or client achievement, (2) student or client behavior/engagement, (3) teacher or practitioner practice and instruction, and (4) school/class/program context or culture to inform decisions related to planning, instruction or actions.

Registration Restrictions: Graduate standing or instructor permission

Prerequisites: EDRS A660 with a minimum grade of B or EDSY A661 with a minimum grade of B.

EDRS A662 Action Research in Education 3 Credits

Examines theory and practice of action research in education. Analyzes and evaluates action research and supports the development of an action research project.

Registration Restrictions: Graduate standing or instructor permission

Prerequisites: EDRS A660.

EDRS A663 Research Design 3 Credits

Explores research design, with an emphasis on developing viable research proposals.

Registration Restrictions: Graduate standing or instructor permission

Prerequisites: EDRS A660 with a minimum grade of B.

EDRS A664 Developing and Writing Literature Reviews 2 Credits

Focuses on developing skills in reviewing professional literature.

Participants will develop and practice the skills of literature search, organization, review and synthesis, resulting in a narrative survey of academic literature for a focused topic area.

Registration Restrictions: Graduate standing.

Prerequisites: EDRS A660.

EDRS A667 Program Evaluation Fundamentals 3 Credits

Introduces and explores purpose, process and utility of program evaluation. Examines types and models of program evaluation, and the roles of partners, clients and stakeholders. Provides practice in the selection of models, the development of evaluation program designs and logic models, and the steps and activities associated with program evaluations.

Registration Restrictions: Graduate standing or instructor permission

Prerequisites: EDRS A660 with a minimum grade of B.

EDRS A668 Qualitative Research in Education 3 Credits

Addresses major qualitative research traditions and methods, common and developing issues, and essential processes as applied within the field of education.

Registration Restrictions: Graduate standing or instructor permission

Prerequisites: EDRS A660 with a minimum grade of B.

ED: Secondary Education (EDSY)

Courses

EDSY A630 Language, Culture, and Teaching in Secondary Schools 2 Credits

Examines multicultural education as the responsibility of all educators. Focuses on second language acquisition, and how culture influences language and literacy development. Discusses the cognitive academic language demands of content area classrooms. Emphasis is placed on integrating research-based teaching strategies for supporting all aspects of cognitive academic language development, including reading, oral language, writing, and visual literacy. Includes the importance of culturally responsive teaching as an integral component of the learning environment.

Special Note: Concurrent enrollment in internship required.

Registration Restrictions: Departmental approval

Prerequisites: EDFN A478 and EDFN A602.

EDSY A644 Learning Environments in Secondary Classrooms 3 Credits

Examines educational theories and research in educational psychology. Develops a framework for professional practice. Focus is on student learning, development and academic achievement, with attention given to the development of classroom learning environments that meet the diverse needs of students.

Registration Restrictions: Graduate standing

EDSY A648 Developing Literacies in the 21st Century Classroom 3 Credits

Analysis and evaluation of current learning theories, models and best practices for developing multiple forms of 21st century literacies in the secondary classroom.

Registration Restrictions: Graduate standing in the College of Arts and Sciences School of Education and department approval

Prerequisites: EDFN A647.

EDSY A661 Assessment in Secondary Classrooms 3 Credits

Fundamentals of standards-based curriculum planning and assessment for the diverse student populations in middle and high school classrooms. Focuses on the development of professional teaching dispositions and practices appropriate for secondary curricula.

Registration Restrictions: Graduate standing

EDSY A663 Teaching English/Language Arts in Secondary Schools 3 Credits

Fundamentals of standards-based, integrated curriculum planning and assessment for the diverse student populations in secondary English/Language Arts classrooms. Focuses on the development of professional teaching dispositions and practices appropriate for secondary English/Language Arts curricula. Integrates technology and all forms of literacy.

Special Note: Concurrent enrollment in internship is required.

Registration Restrictions: Departmental approval

Prerequisites: EDFN A601 with a minimum grade of C and EDFN A602 with a minimum grade of C and EDFN A603 with a minimum grade of C.

EDSY A664 Teaching Social Studies in Secondary Schools 3 Credits

Fundamentals of standards-based, integrated curriculum planning and assessment for the diverse student populations in secondary social studies classrooms. Focuses on the development of professional teaching dispositions and practices appropriate for social studies curricula. Integrates technology and all forms of literacy.

Special Note: Concurrent enrollment in internship is required.

Registration Restrictions: Departmental approval

Prerequisites: EDFN A601 with a minimum grade of C and EDFN A602 with a minimum grade of C and EDFN A603 with a minimum grade of C.

EDSY A665 Teaching Mathematics in Secondary Schools 3 Credits

Fundamentals of standards-based, integrated curriculum planning and assessment for the diverse student populations in secondary mathematics classrooms. Focuses on the development of professional teaching dispositions and practices appropriate for secondary mathematics curricula. Integrates technology and all forms of literacy.

Special Note: Concurrent enrollment in internship is required.

Registration Restrictions: Departmental approval

Prerequisites: EDFN A601 with a minimum grade of C and EDFN A602 with a minimum grade of C and EDFN A603 with a minimum grade of C.

EDSY A667 Teaching World Language in Secondary Schools 3 Credits

Fundamentals of standards-based, integrated curriculum planning and assessment for the diverse student populations in secondary world language classrooms. Focuses on the development of professional teaching dispositions and practices appropriate for secondary world language curricula. Integrates technology and all forms of literacy.

Special Note: Concurrent enrollment in internship is required.

Registration Restrictions: Departmental approval

Prerequisites: EDFN A601 with a minimum grade of C and EDFN A602 with a minimum grade of C and EDFN A603 with a minimum grade of C.

EDSY A668 Teaching English as a Second Language in Secondary Schools 3 Credits

Fundamentals of standards-based, integrated curriculum planning and assessment for the diverse student populations in secondary classrooms. Includes content areas typically taught in secondary English as a second language/bilingual curriculum. Focuses on the development of professional teaching dispositions and practices appropriate for secondary curricula. Integrates technology and all forms of literacy.

Special Note: Concurrent enrollment in internship is required.

Registration Restrictions: Departmental approval

Prerequisites: EDFN A601 with a minimum grade of C and EDFN A602 with a minimum grade of C and EDFN A603 with a minimum grade of C.

EDSY A669 Teaching Science in Secondary Schools 3 Credits

Fundamentals of standards-based, integrated curriculum planning and assessment for the diverse student populations in secondary science classrooms. Focuses on the development of professional teaching dispositions and practices appropriate for a safe and humane inquiry-based secondary science learning environment that emphasizes the learner, the content, the context and the community. Integrates technology and all forms of literacy.

Special Note: Concurrent enrollment in internship is required.

Registration Restrictions: Departmental approval

Prerequisites: EDFN A601 with a minimum grade of C and EDFN A602 with a minimum grade of C and EDFN A603 with a minimum grade of C.

ED: Special Education (EDSE)

Courses

EDSE A212 Human Development and Learning 3 Credits

Emphasizes cognitive, physical, emotional, social and communicative development of children and youth. Explores the patterns and sequences of development in terms of learning that is occurring in the home, school or community environment. Applies human development and learning theories to formal and informal learning, including cultural considerations. Examines the major categories of exceptionalities and appropriate teaching and curricular requirements to meet the needs of all learners.

EDSE A311Y Special Children from Birth through Five 3 Credits

Examines foundational concepts, laws, policies and procedures in early intervention (EI) and early childhood special education services (ECSE). Emphasizes young children with disabilities, family collaboration, Individual with Disabilities Education Act, and an introduction to effective interventions and evidence-based practices.

Registration Restrictions: Junior, senior or graduate standing

Prerequisites: EDSE A212 with a minimum grade of C or PSY A150 with a minimum grade of C or PSY A365 with a minimum grade of C.

EDSE A313Y Positive Behavior Intervention and Supports for Early Childhood 3 Credits

Provides a critical study of theoretical and practical issues related to positive behavior supports in early childhood settings. Emphasizes concepts and skills needed to conduct functional behavior assessments and to design, implement and evaluate behavior support programs. Includes effective and evidence-based prevention, teaching and reinforcement strategies, along with crisis management strategies for young children.

Prerequisites: EDSE A212 with a minimum grade of C or PSY A150 with a minimum grade of C or PSY A365 with a minimum grade of C.

EDSE A320Y Assessment in Early Childhood Special Education 3 Credits

Compares methods of assessment for young children with a focus on ecological and family-centered approaches. Topics include authentic, curriculum-based and norm-referenced assessment methods, IDEA Part C and Part B eligibility, legal and ethical implications, and special considerations for cultural and linguistically diverse populations.

Special Note: This course requires 15 field hours and may require a background check.

Prerequisites: EDSE A311Y with a minimum grade of C.

EDSE A336 Classroom Guidance and Behavior Management 3 Credits

Focuses on the theories and evidence-based practice of classroom guidance and behavior management for students with exceptional learning needs. Emphasizes culturally responsive practices in the social-emotional development of students with exceptional learning needs.

Registration Restrictions: Junior or senior standing and departmental approval

Prerequisites: EDSE A212 with a minimum grade of C.

EDSE A410 Clinical Assessment: Eligibility and Program Planning 3 Credits

Provides a practical, applied approach for analyzing and synthesizing assessment for eligibility, program planning, and progress monitoring.

Special Note: Course includes 15 hours of field experience.

Registration Restrictions: Admission to the College of Education and departmental approval

Prerequisites: (EDSE A212 with a minimum grade of C or PSY A365 with a minimum grade of C) and (EDFN A300 with a minimum grade of C or EDFN A304 with a minimum grade of C).

EDSE A412 Curriculum and Strategies I: Low Incidence 3 Credits

Development, implementation, and evaluation of IEPs for students with Intensive Needs (e.g., Autism, Multiple Disabilities, Physical Disabilities). Provides in-depth understanding of best practice strategies for supporting students with low incidence disabilities.

Special Note: Course includes 15 hours of field experience.

Registration Restrictions: Admission to the College of Education and departmental approval

Prerequisites: (EDSE A212 with a minimum grade of C or PSY A365 with a minimum grade of C) and (EDFN A300 with a minimum grade of C or EDFN A304 with a minimum grade of C).

EDSE A422 Curriculum and Strategies II: High Incidence 3 Credits

Provides in-depth understanding of best practice strategies for supporting students with high incidence disabilities. Discusses development, implementation and evaluation of IEPs for students with mild to moderate learning and behavior problems. Emphasizes inclusive educational settings and collaborative skills needed to work effectively with other professionals.

Special Note: Course includes 15 hours of field experience and requires a background check.

Registration Restrictions: Admission to the School of Education and department approval

May Be Stacked With: EDSE A622

Prerequisites: (EDSE A212 with a minimum grade of C or PSY A365 with a minimum grade of C) and (EDFN A300 with a minimum grade of C or EDFN A304 with a minimum grade of C).

EDSE A422Y Strategies: Infants & Toddler Special Education 3 Credits

Provides a critical study and application of best practices in evidence-based intervention strategies for infants and toddlers with disabilities or developmental delays. Focuses on family-centered routines- and activity-based intervention in the home, natural environment and infant/toddler early care settings.

Special Note: Course requires 15 field hours and may require a background check.

May Be Stacked With: EDSE A622Y

Prerequisites: EDSE A311Y with a minimum grade of C.

EDSE A423Y Strategies: Preschool Special Education 3 Credits

Provides a critical study of best practices in evidence-based intervention strategies for preschool-aged children with disabilities, developmental delays or those at-risk for delays. Focuses on inclusive practices, tiered instructional approaches, and the application of routines-based and activity-based intervention in preschool and community settings.

Special Note: This course requires 15 field hours and may require a background check.

May Be Stacked With: EDSE A623Y

Prerequisites: EDSE A311Y with a minimum grade of C.

EDSE A425 Math for Special Learners 3 Credits

Provides assessment and instructional strategies in mathematics for teachers of students with disabilities. Focuses on evidence-based practice, curriculum-based assessments, differentiated instruction, and standards-based instruction.

Registration Restrictions: Admission to the College of Education and departmental approval

Prerequisites: (EDSE A212 with a minimum grade of C or PSY A365 with a minimum grade of C) and (EDFN A300 with a minimum grade of C or EDFN A304 with a minimum grade of C) and MATH A211 with a minimum grade of C and MATH A212 with a minimum grade of C.

EDSE A475 Science, Technology, Reading, Engineering, Art and Math for Exceptional Learners 3 Credits

Focuses on integrating reading and the arts into science, technology, engineering and mathematics (STEM) in inclusive classrooms. Addresses relevant laws in special education, culturally responsive assessment, individualized education program (IEP) goals and objectives, accommodations and modifications, and unit planning for students with exceptional learning needs in inclusive classrooms.

Special Note: Requires a 30 hour practicum.

Registration Restrictions: Junior standing or higher and departmental approval.

Prerequisites: EDSE A212 with a minimum grade of C.

EDSE A482 Inclusive Classrooms for All Children 3 Credits

Provides an in-depth understanding of concepts, strategies and issues that surround supporting the learning and development of students with exceptional learning needs in the general education classroom.

Registration Restrictions: Junior standing or higher

EDSE A483 Language and Literacy: Assessment and Interventions 3 Credits

Focuses on literacy development for children who have special needs, are linguistically and culturally diverse, and/or at-risk for learning problems. The relationship among language, reading, and writing is explored. Topics include assessment, instructional strategies, Individualized Education Program (IEP) development, and models of literacy programs.

EDSE A484 Collaboration and Partnerships Between Families and Professionals 3 Credits

Explores concepts, strategies and issues that surround working with families and other collaborative partners of students with exceptional learning needs. Presents concepts and strategies necessary to prepare pre-service special education teachers for culturally responsive collaborative partnerships, including family-professional interactions and professional-professional interactions.

Registration Restrictions: Sophomore standing or higher and departmental approval. Completion of or concurrent registration in EDSE A482 recommended.

Prerequisites: EDSE A212 with a minimum grade of C.

EDSE A486 Transition Planning for Secondary Students with Disabilities 3 Credits

Provides knowledge, strategies and resources necessary to prepare adolescents and young adults with disabilities for the transition from school to future careers, continuing education and independent living.

Special Note: Requires field placement.

Registration Restrictions: Admission to the College of Education and departmental approval required.

Prerequisites: (EDSE A212 with a minimum grade of C or PSY A365 with a minimum grade of C) and (EDFN A300 with a minimum grade of C or EDFN A304 with a minimum grade of C).

EDSE A490 Selected Topics: Early Childhood Special Education 3 Credits

Focuses on milestones in the developmental domains of communication, early literacy and play.

Registration Restrictions: Junior or senior standing.

May Be Stacked With: EDSE A690

EDSE A495A Field Experience in Special Education: Elementary 3 Credits

Supervised 80-hour field experience in a K-6 special education/inclusive classroom.

Special Note: Weekly seminar required.

Registration Restrictions: Senior standing, departmental approval and admission to field experience.

Prerequisites: EDSE A336 with a minimum grade of C and EDSE A410 with a minimum grade of C and EDSE A412 with a minimum grade of C and EDSE A422 with a minimum grade of C and EDSE A425 with a minimum grade of C and EDSE A483 with a minimum grade of C.

EDSE A495B Field Experience in Special Education: Secondary 3 Credits

Supervised 80-hour field experience in a 7-12 special education/inclusive classroom.

Special Note: Weekly seminar required.

Registration Restrictions: Senior standing, departmental approval and admission to field experience.

Prerequisites: EDSE A336 with a minimum grade of C and EDSE A410 with a minimum grade of C and EDSE A412 with a minimum grade of C and EDSE A422 with a minimum grade of C and EDSE A425 with a minimum grade of C and EDSE A483 with a minimum grade of C.

EDSE A495Y Field Experience in Early Childhood Special Education 3 Credits

Supervised 80-hour field placement in early intervention and/or early childhood special education setting.

Special Note: Weekly seminar required.

Prerequisites: EDSE A313 with a minimum grade of C and EDSE A410Y with a minimum grade of C and EDSE A411Y with a minimum grade of C and EDSE A422Y with a minimum grade of C and EDSE A423Y with a minimum grade of C.

EDSE A607 Foundations for Infant and Toddler Social Emotional Health and Development 3 Credits

Examines infant and toddler development within the context of caregiving relationships. Topics include developmental theory, attachment and emotional relationships, social development and learning, and cultural and societal influences on early childhood development.

Special Note: This course requires 15 hours of field experience and may require a background check.

Registration Restrictions: Graduate standing and department approval

EDSE A610 Clinical Assessment: Eligibility and Program Planning 3 Credits

Provides a practical, applied approach for analyzing and synthesizing assessment for eligibility, program planning, and progress monitoring. Course includes techniques for formal and informal tools and procedures with a review of terminology and statistics. Emphasizes concepts related to assessment including response to intervention, culturally and linguistically diverse learners, academically diverse learners, and accommodations.

Registration Restrictions: Graduate standing.

EDSE A610Y Assessment of Infants & Toddlers in Early Childhood Special Education 3 Credits

Provides a practical, applied approach of methods for assessing infants and toddlers with special needs in partnership with families. Course emphasizes methods used for eligibility determination, intervention and program planning. Administration and interpretation of authentic assessments and standardized, norm-referenced tools are emphasized along with special considerations for children from diverse linguistic and cultural backgrounds.

Special Note: Course includes a 30 hour field experience and may require a background check.

Registration Restrictions: Graduate standing and admission to the Special Education Program or graduate certificate in Children's Mental Health

Prerequisites: EDSE A607 with a minimum grade of C.

EDSE A611Y Assessment in Preschool Special Education 3 Credits

Provides a practical, applied approach for analyzing and synthesizing assessment information for eligibility, program planning and progress monitoring with children 3-5 years old. Emphasizes concepts related to authentic and play-based assessment, curriculum-based assessments, multi-tiered systems of support and applications for cultural and linguistically diverse populations.

Special Note: This course includes a 30 hour field experience and may require a background check.

Prerequisites: EDSE A607 with a minimum grade of C.

EDSE A612 Curriculum and Strategies I: Low Incidence 3 Credits

Development, implementation and evaluation of IEPs for students with intensive needs (e.g., autism, multiple disabilities, physical disabilities). Provides in-depth understanding of evidence-based practices for supporting students with low incidence disabilities. Emphasizes inclusive educational settings and collaborative skills needed to work effectively with parents and other professionals to provide a comprehensive inclusive program to students with intensive needs.

Special Note: Course includes 15 hours of field experience.

Registration Restrictions: Graduate standing and departmental approval.

EDSE A622 Curriculum and Strategies II: High Incidence 3 Credits

Development, implementation, and evaluation of IEPs for students with mild to moderate learning and behavior challenges. Provides in-depth understanding of best practice strategies for supporting students with high incidence disabilities. Emphasizes inclusive educational settings and collaborative skills needed to work effectively with other professionals.

Special Note: Course includes 15 hours of field experience.

Registration Restrictions: Graduate standing and department approval.

May Be Stacked With: EDSE A422

EDSE A622Y Strategies and Interventions: Infant and Toddler Special Education 3 Credits

Provides in-depth understanding and application of best practices in evidence-based intervention strategies for infants and toddlers with disabilities or developmental delays, including those at-risk. Focuses on family-centered routines- and activity-based intervention in the home and infant/toddler early care settings.

Special Note: Course requires a 15-hour field placement and may require a background check.

Registration Restrictions: Graduate standing and admission to the Special Education Program or Graduate Certificate in Children's Mental Health.

May Be Stacked With: EDSE A422Y

Prerequisites: EDSE A607 with a minimum grade of C.

EDSE A623 Language and Literacy: Best Practices in Assessment and Intervention 3 Credits

Current research on literacy acquisition, assessment, and intervention. Emphasizes use of evidence-based practices in assessment and intervention. Identifies the link between language and literacy development and intervention. Considers academic, cultural, and linguistic diversity.

Registration Restrictions: Graduate standing.

EDSE A623Y Strategies and Interventions: Preschool Special Education 3 Credits

Provides a critical study and application of best practices in evidence-based intervention strategies for preschool-aged children with disabilities, developmental delays or those at-risk for delays. Focuses on inclusive practices, tiered instructional approaches, and the application of routines-based and activity-based intervention in preschool settings.

Special Note: This course requires 15 hours of field experience and may require a background check.

Registration Restrictions: Graduate standing and admission to Special Education Program or Graduate Certificate in Children's Mental Health.

May Be Stacked With: EDSE A423Y

Prerequisites: EDSE A607 with a minimum grade of C.

EDSE A624 Social/Emotional Development, Assessment, and Intervention 3 Credits

Current research in both normal and abnormal social/emotional development. Emphasizes the use of research-based practices in assessment and intervention. Explores academic and cultural diversity in the social/emotional growth of students with learning differences.

Registration Restrictions: Graduate standing.

EDSE A625 Teaching Mathematics to Special Learners 3 Credits

Provides assessment and instructional strategies in mathematics for teachers of students with disabilities. Focuses on standards-based instruction, explicit instruction, curriculum-based assessments, and preparation of students for high stakes testing.

Registration Restrictions: Graduate standing.

EDSE A632 Special Education Law: Principles and Practices 3 Credits

Examines three federal laws that form the foundation of disability law: Individuals with Disabilities Education Act (IDEA) 2004; Section 504 of the Rehabilitation Act of 1973; and the Americans with Disabilities Act. Focuses on substantive principles that underlie procedural requirements. Includes due process issues and case law analysis. Includes creation of a legally defensible Individual Educational Program (IEP).

Registration Restrictions: Graduate standing.

EDSE A633 Autism: Communication and Social Disorders 3 Credits

Focuses on evidence-based practice for teaching students with Autism Spectrum Disorders in the school and community settings. Emphasizes teaming with families, related service providers, and community agencies to achieve best outcomes.

Registration Restrictions: Graduate standing and departmental approval

EDSE A634 Support and Supervision of Paraeducators 3 Credits

Review and analysis of the literature on utilization, support, and supervision of paraeducators. Special attention is given to the knowledge and skills needed by supervising teachers. Course includes the benefits and concerns regarding utilization of paraeducators, and common problems and solutions are identified.

Registration Restrictions: Graduate standing.

EDSE A635 Universal Design for Learning: Differentiation of Instruction for All Learners 3 Credits

Examination and exploration of research-based strategies and interventions designed to differentiate instruction for students with exceptional learning needs. Focuses on Universal Design for Learning (UDL). Addresses the role of assistive technology in differentiating instruction to support diverse learners in school and community settings.

Registration Restrictions: Graduate standing in the College of Arts and Sciences School of Education

EDSE A637 Inclusive Teaching and Learning in Content Area Classrooms 3 Credits

Focuses on the inclusion of students with special learning needs and disabilities in the content area classroom. Addresses the philosophy of inclusion and the role of the content area teacher in providing appropriate classroom instruction for all the students within the inclusive classroom and other least restrictive settings.

Registration Restrictions: Departmental approval and graduate standing

Prerequisites: EDFN A601 with a minimum grade of C and EDFN A602 with a minimum grade of C and EDFN A603 with a minimum grade of C.

EDSE A670 Topics in Special Education 1-3 Credits

Explores issues of concern to professionals in special education and related fields.

Special Note: May be repeated with a change in subtitle. A maximum of 6 credits may be applied to a degree program.

Registration Restrictions: Graduate standing

EDSE A674 Family Partnerships in Early Childhood Special Education 3 Credits

A family systems approach to the intervention for young children with disabilities. Methods in using tools that promote family involvement in the intervention are emphasized.

Registration Restrictions: Graduate standing.

EDSE A677 Multidisciplinary Seminar in Children's Mental Health 1 Credit

Provides an interdisciplinary approach to working with children and families in a variety of behavioral/mental health and educational settings.

Special Note: Course is one credit per semester over two sequential semesters.

Registration Restrictions: Graduate standing

Crosslisted With: PSY A677 and SWK A677

EDSE A686 Transition Services for Secondary Students with Disabilities 3 Credits

In-depth examination of issues related to transition programming for secondary students with disabilities within educational, personal/social and community-based settings. Content addresses transition planning processes, curricular implications, curriculum-based vocational assessment and community-based instruction.

Special Note: Course includes 15 hours of field experience.

Registration Restrictions: Graduate standing and department approval

EDSE A690 Selected Topics in Special Education or Early Childhood Special Education **3 Credits**

Current issues of concern to professionals in special education and related fields.

Special Note: Students who take EDSE A490 may take EDSE A690 for credit. May be repeated with a change of title.

Registration Restrictions: Graduate standing

May Be Stacked With: EDSE A490

EDSE A691 Children's Mental Health Systems of Care **3 Credits**

Expands systems of care as a coordinated network of community-based services and supports that are organized, multidisciplinary, and in partnership with youth and family. Addresses the cultural and linguistic needs of families in order to meet the challenges of children and youth with serious mental health needs.

Registration Restrictions: Graduate standing

Crosslisted With: PSY A691 and SWK A691

EDSE A692 Internship Seminar in Special Education Teaching **1 Credit**

The seminar is an ongoing exchange during students' internship experience where interns are both participants and developers. Students share their own experiences and engage in and discuss what it means to participate in an ongoing process of professional development as teachers and learners in their classrooms and school communities.

Special Note: Must be enrolled in one of the following internships: EDSE A695E or EDSE A695S.

Registration Restrictions: Graduate standing and department approval

Prerequisites: EDSE A610 and EDSE A612 and EDSE A622 and EDSE A623 and EDSE A624 and EDSE A625.

EDSE A692Y Internship Seminar in Early Childhood Special Education Teaching **1 Credit**

Provides students with opportunities to share about and reflect upon their experiences during Advanced Internship in Early Childhood Special Education. Students engage in and discuss what it means to participate in an ongoing process of professional development as teachers and learners and critically reflect upon their practice.

Registration Restrictions: Department approval

Prerequisites: EDSE A607 with a minimum grade of C and EDSE A610Y with a minimum grade of C and EDSE A611Y with a minimum grade of C and EDSE A622Y with a minimum grade of C and EDSE A623Y with a minimum grade of C and EDSE A674 with a minimum grade of C.

Corequisites: EDSE A695Y.

EDSE A695E Advanced Internship in Special Education: Elementary **3-6 Credits**

Supervised internship in elementary school settings with children with disabilities.

Special Note: Must apply by specified deadline--see advisor.

Registration Restrictions: Graduate standing. Departmental approval.

EDSE A695S Advanced Internship in Special Education: Secondary **3-6 Credits**

Supervised internship in secondary school settings with children with disabilities.

Special Note: Must apply by specified deadline--see advisor.

Registration Restrictions: Graduate standing. Department approval.

EDSE A695Y Advanced Internship: Early Childhood Special Education **3-6 Credits**

Supervised advanced internship in early intervention and early childhood special education. Allows for application of intervention and assessment strategies in early intervention and early childhood special education settings.

Special Note: This course requires 500 hours of internship, of which a minimum of 200 hours must be in an infant learning setting and a minimum of 200 hours must be in a school district setting. The remaining 100 hours can be applied to either setting.

Registration Restrictions: Department approval

Prerequisites: EDSE A607 with a minimum grade of C and EDSE A610Y with a minimum grade of C and EDSE A611Y with a minimum grade of C and EDSE A622Y with a minimum grade of C and EDSE A623Y with a minimum grade of C and EDSE A624 with a minimum grade of C.

Corequisites: EDSE A692Y.

ED: Speech Language Pathology (EDSL)

Courses

EDSL A201 Foundations of Communication Disorders **3 Credits**

Examines common developmental and acquired speech, language and hearing disorders, including etiologies, characteristics, prevention, assessment and intervention. Considers multicultural communication differences. Describes the interdisciplinary nature of the field of communication disorders, particularly as it relates to educational, health and developmental settings.

EDSL A301 Anatomy and Physiology of Speech and Hearing **3 Credits**

Examines the anatomy and physiology of the systems involved in human communication and swallowing: respiration, phonation, articulation/resonance, nervous system, auditory system, and mastication/ deglutition. Examines the relationship between anatomy, physiology and disorders of communication.

Registration Restrictions: Department approval

EDSL A302 Phonetics **3 Credits**

Explores the production, classification and transcription of speech sounds. Develops skills in transcription of speech at the vowel, consonant and single-word level as well as connected speech. Differentiates speech disorders from dialectic variations.

Registration Restrictions: Departmental approval

EDSL A303 Language Development Across the Lifespan **3 Credits**

Explores the normal acquisition of language. This includes the components; the perceptual, social and cognitive bases; theories of language development; and how language evolves from infancy through adulthood. Also explores the impact of second language learning and cultural influences on language development.

Registration Restrictions: Departmental approval

EDSL A401 Phonology and Articulation Development and Disorders 3 Credits

Explores articulation and phonological development as well as disorders in relation to acquisition, multicultural factors, appraisal, differential diagnosis and remediation.

Registration Restrictions: Departmental approval

Prerequisites: EDSL A302 with a minimum grade of C or concurrent enrollment.

EDSL A402 Audiology 3 Credits

Explores normal hearing, causes and effects of impaired hearing, hearing testing procedures, and management of hearing loss.

Registration Restrictions: Departmental approval

EDSL A403 Aural Rehabilitation 3 Credits

Integrates the science of hearing loss identification and management with specific emphasis on the strategies speech-language and hearing professionals use in providing support and counseling. Also develops habilitation/rehabilitation plans to maximize auditory skills and promote communication success for children and adults.

Registration Restrictions: Departmental approval

EDSL A410 Speech Science 3 Credits

Explores the physiological and acoustic correlates of the speech production mechanism. Introduces speech science theory, instrumentation and measurement.

Registration Restrictions: Departmental approval

EDSL A411 Neurological Foundations of Speech and Hearing 3 Credits

Explores neuroanatomy and neurophysiology, including current research of nervous system structures and functions important for speech and language. Critically analyzes current theories of the neurophysiology utilized in speech and language.

Registration Restrictions: Departmental approval

Prerequisites: BIOL A100 with a minimum grade of C or BIOL A111 with a minimum grade of C or BIOL A113 with a minimum grade of C or BIOL A114 with a minimum grade of C or EDSL A301 with a minimum grade of C.

EDSL A695A Beginning Internship in Speech-Language Pathology 1-8 Credits

Supervised beginning internship in speech-language pathology in the UAA Speech-Language Clinic. Emphasizes development of clinical competencies in the areas of Evaluation, Intervention, and Interaction and Personal Qualities as defined by the American Speech-Language and Hearing Association 2014 Standards and Implementation Procedures for the Certificate of Clinical Competence in Speech-Language Pathology.

Registration Restrictions: Departmental approval

EDSL A695B Advanced Internship in Speech-Language Pathology 1-4 Credits

Provides supervised internship experiences in speech-language pathology in a variety of settings with clients/patients across the lifespan who experience diverse communication and/or swallowing disorders. Emphasizes development of clinical competencies in the areas of Evaluation, Intervention, and Interaction and Personal Qualities as defined by the American Speech-Language and Hearing Association 2014 Standards and Implementation Procedures for the Certificate of Clinical Competence in Speech-Language Pathology.

Registration Restrictions: Departmental approval

Prerequisites: EDSL A695A with a minimum grade of B.

ED: Teaching and Learning (EDTL)

Courses

EDTL A651 Curriculum Theory and Design 3 Credits

Examines curriculum theory and design in education. Analyzes history of and current themes in curriculum studies. Examines and applies curriculum design approaches and models, with particular attention given to culturally responsive and place-based education.

Registration Restrictions: Graduate standing

EDTL A690 Selected Topics in Teaching and Learning 3 Credits

Examines current issues, themes, strategies and/or trends in teaching and learning.

Special Note: May be repeated for a maximum of 6 credits with change in subtitle.

Registration Restrictions: Graduate standing

EDTL A698 Teaching and Learning Research Project 1 Credit

Conduct an applied research project in teaching and learning under the supervision of a faculty advisor. Research results will be included in a professional portfolio and presented publicly.

Special Note: May be repeated for a maximum of 3 credits.

Registration Restrictions: Graduate standing and admission to the M.Ed. in Teaching and Learning program.

Prerequisites: EDRS A660.

Economics (ECON)

Courses

ECON A100 Political Economy 3 Credits

Introduces economics as a lens for making personal decisions and for understanding the complexity of the modern global marketplace. The economic way of thinking encourages students to approach policy issues with an eye toward quantifying and trading off social costs and benefits.

Attributes: UAA Social Sciences GER.

ECON A123 Introduction to Behavioral Economics 3 Credits

Introduces economics, incorporating insights from psychology. Develops and applies research finding implications to topics that include personal finance, health, happiness, and the design of public policies.

Attributes: UAA Social Sciences GER.

ECON A201 Principles of Macroeconomics 3 Credits

Theoretical approach to determination of the national income level and economic activity including coverage of the history of macroeconomic theory with special emphasis on economic growth, inflation, business cycles, international finance, and monetary and fiscal policy.

Registration Restrictions: Minimum one year of high school algebra required.

Attributes: UAA Social Sciences GER.

ECON A202 Principles of Microeconomics 3 Credits

The theory of prices and markets, industrial organization, public policy, income distribution, contemporary problems of labor and business, and international trade, including coverage of the history of microeconomic theory.

Registration Restrictions: Minimum one year of high school algebra required.

Attributes: UAA Social Sciences GER.

ECON A210 Environmental Economics and Policy 3 Credits

Survey of environmental policy, emphasizing market-oriented approaches to problems. Present value, cost-benefit analysis, and nonmarket valuation tools are developed and applied to Alaska and global environmental and natural resource issues.

Registration Restrictions: MATH A105 with minimum grade of C or completion of quantitative skills GER requirement.

Prerequisites: MATH A105 with a minimum grade of C or MATH A121 or MATH A151 or MATH A221 or MATH A251 or MATH A252.

Attributes: UAA Social Sciences GER.

ECON A211 The Economics of Fish 3 Credits

Introduces key insights of economics related to fisheries, aquaculture, fish processing, the seafood distribution chain, fish prices, fish marketing, and economic impacts of the seafood industry. Intended for people working in any part of the seafood industry or studying fisheries, aquaculture or other seafood-related fields.

ECON A290 Special Topics in Economics 3 Credits

Study of specific current issues, techniques, and trends in economics.

Special Note: May be repeated with a change of subtitle/topic. Maximum of 9 elective credits may be used for the BA and BBA Economics degrees. Check class listing for specific titles being offered.

ECON A300 The Economy of Alaska 3 Credits

An overview of the economy of Alaska, including approaches for economic analysis of regional economies, the structure of the Alaska economy, trends in major Alaska industries, and important Alaska economic policy issues.

Special Note: Recommended for students with junior or senior standing.

Registration Restrictions: College of Business and Public Policy BBA majors must be admitted to upper-division standing.

ECON A310 Energy Economics 3 Credits

Covers economic theory, empirical analysis, and the political economy of energy production, distribution, and end use. Discusses and analyzes regional and global markets for fossil fuels, electricity, nuclear power, and renewable energy sources. Examines energy institutions and public policies such as taxation, efficiency standards, and environmental regulation.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: ((ECON A201 with a minimum grade of C and ECON A202 with a minimum grade of C) or ECON A210 with a minimum grade of C) and (MATH A105 with a minimum grade of C or MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C or MATH A155 with a minimum grade of C or MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C or MATH A252 with a minimum grade of C).

ECON A312 Econometrics for Business and Economics 3 Credits

Introduces basic concepts in regression analysis and econometric methods. Applies methods to naturally-occurring and experimental data. Emphasizes applications through use of econometrics software and personal computers.

Registration Restrictions: Familiarity with personal computers and basic software applications. Keyboarding of at least 30 wpm recommended.

Prerequisites: (BA A273 with a minimum grade of C or STAT A307 with a minimum grade of C or STAT A308 with a minimum grade of C) and (ECON A201 with a minimum grade of C or ECON A202 with a minimum grade of C).

ECON A315 Urban and Regional Economics 3 Credits

Economic issues examined at the community, regional, and state levels. Examines the location of economic activity, models of regional economic growth, the structure of regional economies, migration, housing and land use issues, and economic policies affecting neighborhoods, communities, cities, and states.

Prerequisites: ECON A201 and ECON A202.

ECON A321 Intermediate Microeconomics 3 Credits

Analysis of demand and supply under various market structures, consumer and producer theory, factor pricing and theory of distribution, and survey of welfare economics.

Prerequisites: ECON A201 with a minimum grade of C and ECON A202 with a minimum grade of C and (MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C).

ECON A324 Intermediate Macroeconomics 3 Credits

Concepts and measurement of national income; analysis of aggregate demand and supply and their relationship to prices, employment, and growth. Review and analyze recent U.S. economic policy and performance.

Prerequisites: ECON A201 and ECON A202.

ECON A325 History of Economic Thought 3 Credits

Economic thought from Aristotle to the present, mercantilism, classical and neoclassical theory, institutional economics, and socialism are examined.

Prerequisites: ECON A201 and ECON A202.

ECON A329 Economic and Business Forecasting 3 Credits

Focuses on the business forecasting methodologies used in today's various industries. Introduces students to basic managerial statistical techniques as well as business forecasting methods and models that are useful for preparing economic and business forecasts and long-term planning.

Prerequisites: BA A273 with a minimum grade of C or STAT A307 with a minimum grade of C or STAT A308 with a minimum grade of C.

ECON A333 Experimental Economics 3 Credits

Applies experimental methods to study behavior in economics. Topics include public good provision, common pool resources, bargaining, fairness and reciprocity, markets and auctions, mechanism design, and policy analysis.

Registration Restrictions: College of Business and Public Policy BBA majors must be admitted to upper-division standing.

Prerequisites: ECON A202 with a minimum grade of C.

ECON A337 Development Economics 3 Credits

Economic approaches to the challenge of development. Physical and human capital, technology, institutions, geography, culture, and natural resources as sources of growth. Policies affecting trade, aid, health, and the environment. Alaska as a developing region.

Prerequisites: ECON A201 and ECON A202.

ECON A341 Labor Economics 3 Credits

Analyzes labor market, employment and unemployment, wage differences, and structure and composition of the labor force. Examines occupational segregation, discrimination, economic aspects of unionism, labor legislation, and social insurance.

Prerequisites: ECON A201 and ECON A202.

ECON A350 Money and Banking 3 Credits

Examines how financial markets and financial institutions affect the macroeconomic state of the economy, how money is created, the role of central banks in financial regulation, and the implementation of monetary policy.

Prerequisites: ECON A201 with a minimum grade of C and ECON A202 with a minimum grade of C.

ECON A351 Public Finance 3 Credits

Introduces government taxation, borrowing, and spending; economic effects of taxation, and influence of fiscal policy on economic activity.

Registration Restrictions: College of Business and Public Policy BBA majors must be admitted to upper-division standing.

Prerequisites: ECON A202 with a minimum grade of C.

ECON A360 Modern Economic History 3 Credits

Examines the role of geography, institutions, technology, and trade in the evolution of the modern economy. Emphasizes the long-run economic performance of Europe and the US. Also covers historic differences between the West and other parts of the world.

Crosslisted With: HIST A360.

Prerequisites: HIST A102 and ECON A201.

ECON A363 International Economics 3 Credits

Studies the pure theory of international trade, including theories of comparative advantage, international monetary theory, and trade policy. Examines international institutions and their role and importance in world trade. Examines the role of free trade agreements and common currency areas.

Prerequisites: ECON A201 with a minimum grade of C and ECON A202 with a minimum grade of C.

ECON A390 Special Topics in Economics 3 Credits

Study of specific current issues, techniques, and trends in economics.

Special Note: May be repeated with a change of subtitle/topic. Maximum of 9 elective credits may be used for the BA and BBA Economics degrees. Check class listing for specific titles being offered.

Prerequisites: ECON A201 with a minimum grade of C and ECON A202 with a minimum grade of C.

ECON A435 Natural Resource Economics 3 Credits

Economic analysis of natural resource use, conservation, and management. Examines minerals, energy, forests, fisheries, and ecosystem services. Uses Alaska examples.

Prerequisites: ECON A321 with a minimum grade of C.

ECON A454 Economics Internship 3 Credits

Work experience in an approved position with supervision and training in applied economics or economic research.

Registration Restrictions: Junior standing as an economics major and permission of ECON faculty internship coordinator.

ECON A456 Behavioral Economics 3 Credits

Expands on traditional microeconomics by attending to the psychological realism of assumptions and the process of choice. Examines the robustness of heuristics and biases that lead to bounds on human rationality and explores how they can affect well-being for good and for ill. Topics include self-control, social norms and preferences, and risk and uncertainty. Explores applications relating to consumer and firm behavior, finance and investing, and public policy.

Special Note: Graduate students can substitute ECON A602 for the prerequisites. Not available for credit to students who have completed ECON A656.

Registration Restrictions: College of Business and Public Policy BBA majors must be admitted to upper-division standing.

May Be Stacked With: ECON A656

Prerequisites: ECON A201 with a minimum grade of C and ECON A202 with a minimum grade of C.

ECON A459 Industrial Organization and Public Policy 3 Credits

Analyzes different market structures. Additional topics include anti-trust and other government regulation; public policy issues in regulated industries, such as transportation, communications, electricity, and gas; and the economic and legal issues and problems arising from noncompetitive market conditions.

Prerequisites: ECON A321 with a minimum grade of C.

ECON A492 Seminar in Economic Research 3 Credits

Requires integration of principles, theories, and methods learned in courses taken throughout the economics major/program. Students analyze, synthesize, and critically evaluate and apply knowledge of economics in a research project. Formal written and oral presentations of the research are required.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and senior standing.

Prerequisites: ECON A321 with a minimum grade of C and ECON A324 with a minimum grade of C and (ECON A312 with a minimum grade of C or ECON A429 with a minimum grade of C).

Attributes: UAA Integrative Capstone GER.

ECON A602 Introduction to Economics for Managers 3 Credits

Introduces economic theory and issues for private and public sector managers. Topics include national income and business cycle analysis, money and banking, and the role of government, theory of prices and markets, and international economics.

Registration Restrictions: Graduate standing

ECON A625 Economics and Public Policy 3 Credits

Applies economic analysis to public policy issues and tools for public management. Uses economics to explain public problems and provide solutions.

Registration Restrictions: Bachelor's degree required.

Prerequisites: ECON A201 and ECON A202.

ECON A640 Economics of Transportation 3 Credits

Economic aspects of the transportation industry with special emphasis on problems of regulation and public policy.

Registration Restrictions: Faculty permission.

ECON A656 Behavioral Economics 3 Credits

Expands on traditional microeconomics by attending to the psychological realism of assumptions and the process of choice. Examines the robustness of heuristics and biases that lead to bounds on human rationality and explores how they can affect well-being for good and for ill. Topics include self-control, social norms and preferences, and risk and uncertainty. Explores applications relating to consumer and firm behavior, finance and investing, and public policy. Research of a selected topic in behavioral economics is required.

Special Note: Not available for credit to students who have completed ECON A456.

Registration Restrictions: Graduate standing

May Be Stacked With: ECON A456

Prerequisites: ECON A602.

Electrical Engineering (EE)

Courses

EE A203 Fundamentals of Electrical Engineering I 4 Credits

Introduces DC and AC circuit analysis techniques including transient analysis, steady state analysis, three phase circuits and ideal amplifiers.

Prerequisites: MATH A253 with a minimum grade of C or concurrent enrollment.

EE A241 Computer Hardware Concepts 4 Credits

Analysis and design of electronic devices used as building blocks for construction of simple combinational and sequential digital systems. Presents formats for data storage, number systems and alphanumeric codes, and methods of implementing logical and arithmetic operations within computers. Relates hardware components' capabilities and limitations to design requirements for computer processing, memory and control functions.

Registration Restrictions: Students must register concurrently for lab section.

Crosslisted With: CSCE A241.

Prerequisites: CSCE A201 with a minimum grade of C or CSE A205 with a minimum grade of C.

Corequisites: EE A241L.

EE A261 MATLAB for Electrical Engineers 3 Credits

Introduces programming skills and MATLAB to solve problems in various electrical engineering focus areas, including circuit analysis, signal analysis and communication.

Prerequisites: CSE A205 with a minimum grade of C and MATH A251 with a minimum grade of C.

EE A306 Dynamics of Systems 3 Credits

Modeling of mechanical, electrical, fluid and thermal elements and systems. Study of free and forced response by the Laplace transform, transfer function and state space models. Time domain and frequency domain responses. Coupled systems, system analogy, sensing and actuation principles.

Crosslisted With: ME A306

Prerequisites: (EE A203 with a minimum grade of C or ES A309 with a minimum grade of C) and ES A210 with a minimum grade of C and MATH A302 with a minimum grade of C.

EE A307 Introduction to Power Systems 3 Credits

An analysis of electric power systems, including topologies, ideal power transformers, balanced three-phase systems, symmetrical components, transmission line parameter calculation and power flow.

Prerequisites: EE A353 with a minimum grade of C.

EE A308 Instrumentation and Measurement 3 Credits

Principles of measurement, instrumentation, Laplace transform, Fourier series, transfer function, steady-state response, calibration, and errors. Signal filtering and amplification, data acquisition, recording, and processing. Methods and devices for measuring strain, force, torque, displacement, velocity, acceleration, pressure, fluid flow properties, and temperature.

Crosslisted With: ME A308.

Prerequisites: MATH A302 with a minimum grade of C and (EE A306 with a minimum grade of C or ME A306 with a minimum grade of C or EE A353 with a minimum grade of C).

EE A314 Electromagnetics 3 Credits

Electromagnetic theory and applications. Static electric fields in free space and material media; steady current systems and associated magnetic effects. Includes magnetostatics, Maxwell's Equations, electromagnetic radiation, transmission lines and relativity.

Crosslisted With: PHYS A314.

Prerequisites: PHYS A212 and PHYS A212L and MATH A302.

EE A324 Electromagnetics II 3 Credits

Use of Maxwell's equations in analysis of plane wave propagation, wave reflection, radiation and antennas, waveguides, cavity resonators, transmission lines, and radio propagation.

Crosslisted With: PHYS A324.

Prerequisites: (EE A314 or PHYS A314) and MATH A302.

EE A324L Electromagnetics Laboratory II 1 Credit

Laboratory experiments using Maxwell's equations in analysis of plane wave propagation, wave reflection, radiation and antennas, waveguides, cavity resonators, transmission lines, and radio propagation.

Corequisites: EE A324.

EE A333 Electronic Devices 4 Credits

An introduction to the properties of semiconductors and the analysis of electronics and electrical devices including diodes, field effect transistors (FETs) and bipolar junction transistors (BJTs). Covers large signal and small signal analysis techniques and common electrical circuit topologies.

Prerequisites: EE A353 with a minimum grade of C or concurrent enrollment.

EE A353 Circuit Theory 3 Credits

Analysis of transfer functions, passive and active filters, Laplace transforms and applications. Introduction to Fourier series and transforms and two port networks.

Prerequisites: EE A203 with a minimum grade of C and MATH A302 with a minimum grade of C or concurrent enrollment.

EE A353L Circuit Theory Lab 1 Credit

Analysis of circuit behavior for passive and active filters. Application of Laplace and Fourier techniques to circuit characterization. This course serves as a laboratory component to EE A353.

Corequisites: EE A353.

EE A354 Engineering Signal Analysis 3 Credits

Analysis using discrete time signals and Fast Fourier Transform (FFT), random signals and noise, analog signals and Fourier transform. Application of probability theory and random variables to analog and discrete signals.

Prerequisites: EE A353 and MATH A302.

EE A407 Power Distribution 3 Credits

Analysis of electrical power distribution and control systems, power flow control, symmetrical faults, power interruption, voltage variations, distributed generation, and economic dispatch with computer-aided analysis.

Prerequisites: EE A204 and EE A353.

EE A417 Green Electrical Energy Systems 4 Credits

Presents major renewable energy sources and methods used to assess, harness and operate them. Discusses the application of power electronics, control and the use of demand-side management, and the effects of market forces on renewable energy and power systems. Major focuses are on power electronics and grid integration of renewable energy systems. Discussions of economic and environmental social policy are integral components of the course.

Prerequisites: EE A353 with a minimum grade of C.

EE A427 Fundamentals of Smart Grids 3 Credits

Introduces the fundamentals of design, analysis and development of smart grids. Covers elements of control, computing, communication, automation and monitoring techniques needed to ensure smart grid operation. Emphasis is on design of smart grids to ensure adaptability as well as interoperability with renewable energy, distributed generation and smart loads.

Special Note: Not available for credit to students who have completed EE A627.

May Be Stacked With: EE A627

Prerequisites: EE A307 with a minimum grade of C.

EE A437 Electrical Machines 3 Credits

Covers the analysis and principles of electromechanical systems. Discusses major classes of electric machines, interactions in electromechanics, and tools and techniques used for operation and control.

May Be Stacked With: EE A637

Prerequisites: EE A307 with a minimum grade of C.

EE A438 Design of Electrical Engineering Systems 3 Credits

Capstone course in which electrical engineering students design an electrical engineering component or system starting with the initial design specification to the implementation and testing. Students apply knowledge and skills learned in their undergraduate curriculum.

Registration Restrictions: Student must be in senior year of BSE degree program or obtain faculty permission. Completion of GER Tier 1 (basic college-level skills) courses.

Attributes: UAA Integrative Capstone GER.

EE A441 Integrated Circuit Design 3 Credits

Develops the design and fabrication of integrated circuits (ICs) used in computer electronics. Describes the material properties, methods of charge transport, energy exchanges, fundamentals of device fabrication, and fabrication process capabilities and limits. Electrical characteristics, timing considerations, heat and power considerations, and reliability of IC devices.

Prerequisites: CHEM A105 and EE A204 and EE A353.

EE A447 Power Electronics 3 Credits

Applies electronic circuits to energy conversion. Discusses modeling, design, analysis, and control of DC-DC converters, AC-DC rectifiers, DC-AC inverters, AC-AC converters, and switch-mode power supplies. Includes power electronics applications in motor drives, uninterrupted power supplies, and power systems.

Prerequisites: EE A307 with a minimum grade of C and EE A333 with a minimum grade of C.

EE A451 Digital Signal Processing 3 Credits

Develops properties and methods of analysis of discrete-time signals, and the techniques used in creating and processing those signals. Topics include discrete-time linear systems, Z-transforms, the Discrete Fourier Transform and Fast Fourier Transform algorithms, digital filter design, system performance analysis and problem-solving. Methods and effects of signal processing are analyzed and evaluated.

Prerequisites: EE A354 with a minimum grade of C.

EE A458 Antenna Theory 3 Credits

Analysis of dipole, loop, aperture, reflector, and other antennas; array theory, radiation resistance, directivity, and input impedance of antennae.

Prerequisites: EE A324 or PHYS A324.

EE A462 Communication Systems 3 Credits

Develops the theory behind the design and operation of electronic communication systems. Includes the mathematical representation of signal and system components and their interaction. Covers power spectra, modulation techniques, frequency response of media and components, detection and recovery of information, and the effects of noise.

Prerequisites: EE A354.

EE A465 Telecommunications 3 Credits

Emphasis in data transmission, guided and wireless transmission, signal encoding, digital data, multiplexing, and circuit and packet switching. Analyze data communications, networking, protocols and standards.

Prerequisites: EE A354.

EE A471 Automatic Control 3 Credits

Feedback control of linear mechanical and electrical systems by using block diagrams with transfer functions of plants, controllers, sensors and actuators. Stability analysis with transfer-function and state-space models. Transient, steady-state analysis, frequency-domain analysis, and design of control systems with Bode plots and the Nyquist criterion.

Crosslisted With: ME A471.

Prerequisites: (EE A306 or ME A306 or EE A353) and (ES A208 or ES A210) and MATH A302.

EE A472 Advanced Linear Systems 3 Credits

Presents a state space linear algebra approach to multiple input and multiple output systems. Explores concepts of controllability and observability that motivate design techniques for optimal open loop and closed loop systems. Presents analysis and design of optimal feedback control systems and design of observers and estimators.

Special Note: Not available for credit to students who have completed ME A672.

May Be Stacked With: ME A672

Prerequisites: EE A471 with a minimum grade of C or ME A471 with a minimum grade of C.

EE A495 Electrical Engineering Internship 3 Credits

Application of electrical engineering in a professional work setting. The student will undertake the design, analysis and documentation of an electrical engineering problem under the supervision of a qualified professional who has agreed in advance to undertake this role.

Special Note: This course cannot be substituted for EE A438.

Registration Restrictions: Instructor approval required.

Prerequisites: EE A354 with a minimum grade of C or EE A307 with a minimum grade of C.

EE A637 Electrical Machines 3 Credits

Analysis and principles of electromechanical systems. Discusses major classes of electric machines, interactions in electromechanics, and tools and techniques used for operation and control.

Special Note: Not available for credit to students who have completed EE A437.

Registration Restrictions: Graduate standing

May Be Stacked With: EE A437

Electronics Technology (ET)

Courses

ET A101 Basic Electronics: DC Circuits 4 Credits

Presents principles of electricity in direct current (DC) circuits, including voltage, current, resistance, and power. Properties of series and parallel circuits. Covers circuit analysis theorems and techniques.

Prerequisites: MATH A105 with a minimum grade of C.

ET A102 Basic Electronics: AC Circuits 4 Credits

Presents principles of alternating current (AC) circuits, including vectors, phase relationships, inductive and capacitive reactance and impedance. Covers AC circuit analysis, series and parallel resonant circuits, transformers, and network analysis.

Prerequisites: ET A101 with a minimum grade of C and ET A166 with a minimum grade of C or concurrent enrollment and MATH A105 with a minimum grade of C.

ET A126 Digital Electronics 4 Credits

Presents principles of digital logic; including number systems, logic gates, logic functions, logic design, and analysis methods.

Prerequisites: MATH A105 with a minimum grade of C.

ET A151 Basic Electricity for the Trades 4 Credits

An introduction to the principles and concepts of electricity as it applies to the non-electronics major. Covers basic electricity and electrical theory, reading of blue prints and electrical plans, analysis of building electrical systems, and installation of electrical devices used in the industry: switches, receptacles, and appliances with 120-volt through 480-volt systems.

Prerequisites: MATH A055.

ET A166 Technical Calculations for AC Circuit Applications 2 Credits

Presents applied calculations for students in AC electronics. Covers basic arithmetic, unit conversions, solving algebraic equations, working with logarithmic and exponential functions, applied basic concepts of trigonometry, and AC electronics applications.

Prerequisites: MATH A105 with a minimum grade of C.

ET A175 Technical Introduction to Computing Systems 3 Credits

Covers principles of digital computing systems, including number systems, data representation, the central processing unit, computer system organization and programming in both assembly and the high-level languages.

Prerequisites: MATH A105 with a minimum grade of C.

ET A240 Computer Systems Interfacing 3 Credits

Introduces concepts, programming techniques and device connections for computer sensing and control systems. Covers program design for device interfacing, common interfacing circuits, analog to digital conversion, digital to analog conversion, and serial communications.

Prerequisites: ET A126 with a minimum grade of C and ET A175 with a minimum grade of C and MATH A105 with a minimum grade of C.

ET A241 Digital Control Systems 3 Credits

Introduces concepts, architecture and development of digital supervisory control and data acquisition (SCADA) systems. Includes systems organization, industrial data communications, data point addressing and recording, programmable logic controller (PLC) connections and programming, and human-machine interface (HMI) design and development.

Prerequisites: ET A240 with a minimum grade of C and MATH A105 with a minimum grade of C.

ET A243 Programmable Logic Controllers 3 Credits

Introduces the programmable logic controller (PLC) for industrial control applications. Includes PLC system design, hardware selection, configuration, input/output connections, programming and troubleshooting.

Prerequisites: ET A126 with a minimum grade of C and MATH A105 with a minimum grade of C.

ET A246 Electronic Industrial Instrumentation 3 Credits

Explains the methods of analog signal conditioning and transmission. Describes common sensors for level, pressure, temperature and chemical analysis. Includes instrument connections, wiring, shielding, voltage loops, current loops and digital controllers.

Prerequisites: ET A102 with a minimum grade of C and MATH A105 with a minimum grade of C.

Emergency Medical Technology (EMT)

Courses

EMT A110 Emergency Trauma Technician 3 Credits

Alaska State certified basic emergency medical course beyond advanced first aid. Emphasizes prevention, assessment, and care of injury and illness commonly encountered in both urban and rural settings.

Registration Restrictions: Must provide evidence of cardiopulmonary resuscitation (CPR) training at the Health Care Provider or Basic Life Support level prior to course conclusion.

EMT A130 Emergency Medical Technician I 8 Credits

Presents skills for proficiency in victim assessment, recognition, and treatment of medical emergencies and other basic life support procedures. May include practicum experience in hospitals, emergency rooms or other sites. Provides the necessary training to become state or nationally registered as an EMT, which is optional.

Special Note: Students must have the strength to be able to move victims, sufficient vision to assess condition of victims and dexterity to perform the skills application procedures.

Registration Restrictions: Provide evidence of CPR training at the professional provider level. A valid CPR credential includes CPR cards, course rosters or a letter from the CPR instructor attesting to the applicant's successful completion of a CPR program and indicating the course included adult, child and infant CPR and AED utilization. Restriction may be waived with instructor approval.

Prerequisites: Accuplacer-Reading Comp with a score of 065 or WRTG A111 or concurrent enrollment or PRPE A107 or concurrent enrollment or WRTG A110 or concurrent enrollment.

EMT A230 Emergency Medical Technician II 3 Credits

Provides the EMT I with added skills of advanced airway, specialized tourniquets, and intravenous treatment.

Special Note: Students desiring Alaska certification must pass, within one year after completing the education program, the written and practical examination for Emergency Medical Technician II administered by Community Health and Emergency Medical Services (CHEMS). In order to obtain a State of Alaska EMT II certification, the student must obtain a CHEMS-approved physician sponsor.

Registration Restrictions: Must be certified as a State of Alaska EMT I or Nationally Registered EMT-Basic (comity is required). Current health care provider CPR card; documentation of 10 patient contacts since becoming a certified EMT and a DHSS-approved sponsoring physician.

Prerequisites: EMT A130.

EMT A231 Emergency Medical Technician III 3 Credits

Emphasizes knowledge and skills necessary to apply electrodes and monitor cardiac activity, defibrillate life-threatening arrhythmias, and administer specific pharmacological agents.

Special Note: Students desiring Alaska certification must pass, within one year after completing the education program, the written and practical examination for Emergency Medical Technician III administered by the Community Health and Emergency Medical Services (CHEMS).

Registration Restrictions: Currently certified in Alaska as an EMT II, documented 10 patient contacts and 10 intravenous sticks.

Prerequisites: EMT A130 and EMT A230.

Engineering & Science Mgmt (ESM)

Courses

ESM A450 Economic Analysis and Operations 3 Credits

Introduces fundamentals of engineering economy, project scheduling, estimating, legal principles, professional ethics and human relations. Prepares students to successfully complete engineering economy questions on the Fundamentals of Engineering licensing exam.

Special Note: Not available for credit toward the Master of Science in engineering management or science management.

Prerequisites: (MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C or MATH A155 with a minimum grade of C or MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C or MATH A252 with a minimum grade of C or MATH A253 with a minimum grade of C) and WRTG A212 with a minimum grade of C.

ESM A601 Engineers and Scientists in Organizations 3 Credits

Introduces contemporary organization structures and the techniques needed to manage engineering and scientific effort. Includes discussion and application of technical leadership theory related to group dynamics and personnel practices in an engineering or scientific organization. Demonstrates the leadership and management skills required to organize, motivate, evaluate, develop and coordinate technical professionals.

Registration Restrictions: Graduate standing or instructor permission

ESM A605 Engineering Economy 3 Credits

Introduces methods for economic justification used to select science or engineering projects and programs and to effectively manage organizational assets. Develops students' capability to define, model and solve practical problems using discounted cash-flow analysis.

Registration Restrictions: Graduate standing or instructor permission

ESM A608 Legal Environment for Engineering, Science and Project Management 3 Credits

Introduces aspects of design, management and construction law applicable to engineers, contractors, project managers and owners. Covers contract law, tort liability and statutory applications for most common legal situations. Emphasizes methods to avoid litigation. Discusses actual cases and outcomes dealing with factually based examples.

Registration Restrictions: Graduate standing or instructor permission

ESM A610 Cost Estimating 3 Credits

Introduces methods used to estimate costs and resources required by the scope of an asset investment option, activity or project. Discusses risks and uncertainties in estimating costs. Demonstrates how the outputs of cost estimating are used as inputs for budget, cost or value analysis; decision-making in business, asset and project planning; and project control processes.

Registration Restrictions: Graduate standing or instructor permission

ESM A617 Technology Management 3 Credits

Explores technology management models and practices. Presents the nature and importance of technological change. Introduces tools to analyze and manage changes in technology-driven organizations.

Registration Restrictions: Graduate standing or instructor approval

Crosslisted With: BA A617

ESM A619 Computer Simulation of Systems 3 Credits

Introduces simulation concepts and methods applied to engineering and science management systems. Introduces most commonly used simulation languages and tools in a hands-on environment. Presents examples of simulation tools applied within a range of professional environments, such as transportation, health care, financial services, etc. Demonstrates how animated simulation models can be used to represent complicated systems to support decision making.

Registration Restrictions: Graduate standing or instructor permission

ESM A620 Statistics for Engineering, Science and Project Management 3 Credits

How to make practical engineering/science/project management decisions through data sampling, using statistical software and interpreting the statistical results. Tools covered include statistical inference, regression analysis, design of experiments, and non-parametric methods.

Registration Restrictions: Graduate level standing or instructor permission

ESM A621 Operations Research 3 Credits

Introduces mathematical techniques for aiding managerial decision making. Topics include linear programming, non-linear programming, network optimization problems, decision analysis, inventory models, dynamic programming, PERT/CPM, queueing models and computer simulation basics. Emphasis is on the application of techniques to engineering and science management situations.

Registration Restrictions: Graduate standing or instructor permission

ESM A623 Total Quality Management 3 Credits

Introduces the concepts and practice of quality management as it relates to sustainability, reliability, maintainability/availability and quality functions within an organization. Demonstrates how quality practices impact business, customer requirements and ongoing operational results. Covers quality management tools including quality management as a system, Kaizen, statistical process control, Lean Six Sigma and creative problem-solving tools.

Registration Restrictions: Graduate standing or instructor permission

ESM A684 ESM Project 3 Credits

Individual study of an actual engineering or science management problem or opportunity, resulting in a written report and presentation including data analysis, results and recommendations for action.

Registration Restrictions: Graduate standing or instructor permission

ESM A699 ESM Thesis 3-9 Credits

Individual research on an existing engineering or science management problem, resulting in a thesis including data analysis, research results, and recommendations for action.

Special Note: May be repeated for a maximum of 9 credits.

Registration Restrictions: Graduate standing or instructor permission

Engineering (ENGR)

Courses

ENGR A105A Engineering Graphics 1 Credit

Introduces engineering graphics without the use of software. Focuses on hand drawing skills with an emphasis on orthographic projections, isometric views, auxiliary views and sectional views.

ENGR A105B Computer-Aided Graphics 1 Credit

Focuses on the use of computer-aided design (CAD) software as a tool for creating engineering graphics.

Prerequisites: ENGR A105A.

ENGR A151 Introduction to Engineering 1 Credit

An introduction to engineering, both as a profession and as a field of study. Introduces students to the roles, responsibilities and capabilities of civil, computer systems, electrical and mechanical engineers.

ENGR A495 Engineering Internship 1 Credit

Professional work experience designed to provide students with the opportunity to investigate the practical applications of engineering design within engineering organizations. Assignments and projects arranged with cooperating organizations and agencies.

Registration Restrictions: Instructor permission.

Engineering Science (ES)

Courses

ES A103 Engineering Graphics 3 Credits

Introduces the fundamentals of engineering graphics and provides training in visualization skills necessary for graphically presenting of engineering ideas using standard drawing techniques and Computer Aided Design (CAD).

Prerequisites: MATH A152 with a minimum grade of C or MATH A155 with a minimum grade of C.

ES A208 Engineering Statics and Dynamics 5 Credits

Static and dynamic analysis of particles and rigid bodies. Statics topics covered include Newton's laws of motion, Newton's law of gravitational attraction, force and force systems, equilibrium, structural analysis, internal forces, friction, and center of gravity and centroid. Dynamics topics covered include particle and rigid body kinematics and kinetics, force and acceleration, work and energy, impulse and momentum, and vibrations.

Prerequisites: MATH A252 with a minimum grade of C and PHYS A211 with a minimum grade of C.

ES A209 Statics 3 Credits

Analyzes force systems in two and three dimensions; discusses composing and resolving of forces and force systems; applies principles of equilibrium for various bodies and simple structures, friction, centroids, and moments of inertia. Applies concept of vector algebra wherever necessary.

Prerequisites: MATH A252 with a minimum grade of C and PHYS A211 with a minimum grade of C and PHYS A211L with a minimum grade of C.

ES A210 Dynamics 3 Credits

Introduces kinematics and kinetics of particles and rigid body motion. Applies principles of work and energy, impulse and momentum to particles and rigid body motion. Applies concept of vector algebra wherever required.

Prerequisites: ES A209 with a minimum grade of C.

ES A261 Introduction to Engineering Computation 3 Credits

Introduces computation methods and tools for engineering applications. Introduction to computer programming with MATLAB.

Prerequisites: MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C.

ES A302 Engineering Data Analysis 3 Credits

Introduces concepts of probability and statistics needed to solve various engineering problems.

Prerequisites: MATH A252 with a minimum grade of C and (ES A261 with a minimum grade of C or EE A261 with a minimum grade of C).

ES A309 Elements of Electrical Engineering 3 Credits

Electrical fundamentals: elementary circuit analysis, network theorems, steady state, and transient analysis of DC circuits with resistors and one energy storage device (L or C). Steady state analysis of AC circuits with resistors, capacitors, and inductors using complex number and phasor representation. Power in DC and AC circuits. Transformers, meters, and applications of simple electrical components and circuits.

Prerequisites: PHYS A212 and MATH A302 or concurrent enrollment.

ES A331 Mechanics of Materials 3 Credits

Stress-strain relations, axially loaded and torsional members, review of shear and bending moment diagrams for beams, flexural and shearing stresses, deflections of beams, plane stress, combined stresses, buckling of columns, elementary design of beams and columns.

Prerequisites: ES A209 with a minimum grade of C and MATH A302 with a minimum grade of C or concurrent enrollment.

ES A341 Fluid Mechanics 3 Credits

Introduction to physical properties and behavior of fluids. Topics include hydrostatics and dynamics of liquids and gases, dimensional analysis, fluid forces on immersed bodies, pipe flow, fluid machinery, and open channel flow.

Prerequisites: ES A209 with a minimum grade of C and (ES A302 with a minimum grade of C or concurrent enrollment or MATH A302 with a minimum grade of C or concurrent enrollment).

ES A341L Fluid Mechanics Laboratory 1 Credit

Provides supplemental explanation and practical exercises applying physical properties and behavior of fluids, including hydrostatics, fluid forces, pipe flow, fluid machinery, and open channel flow.

Prerequisites: ES A341 with a minimum grade of C or concurrent enrollment.

ES A346 Introduction to Thermodynamics 3 Credits

Thermodynamic systems, properties, processes and cycles. Fundamental principles of thermodynamics (first and second laws) and elementary applications.

Prerequisites: (CHEM A106 with a minimum grade of C or PHYS A211 with a minimum grade of C) and MATH A252 with a minimum grade of C.

ES A411 Northern Design 3 Credits

Introduction to design and maintenance of facilities in northern climates to construct sustainable, energy-efficient and durable buildings and infrastructure suitable for the unique needs of northern inhabitants.

Registration Restrictions: Senior standing or graduate standing in an accredited program in architecture or engineering, or instructor permission.

English (ENGL)

Courses

ENGL A120 Critical Thinking **3 Credits**

Introductory course emphasizing principles and techniques of critical thinking. Focuses on a variety of methods for analyzing written and visual arguments in a variety of media.

ENGL A121 Introduction to Literature **3 Credits**

Introduces students to literary genres as a reflection of culture and develops the capacity to analyze and interpret texts through discussions and critical analysis of selected readings.

Attributes: UAA Humanities GER.

ENGL A201 Masterpieces of World Literature I **3 Credits**

Introductory course for majors and non-majors. Emphasizes world literatures from 2000 BCE through the 17th century and teaches essential vocabulary, the development of critical thinking, and the analysis of global and historical perspectives.

Prerequisites: WRTG A111 with a minimum grade of C or WRTG A1W with a minimum grade of C or WRTG A2W with a minimum grade of C or WRTG A3W with a minimum grade of C or Enhanced ACT English with a score of 30 or SAT Critical Reading Score with a score of 620 or SAT Verbal Score with a score of 620.

Attributes: UAA Humanities GER.

ENGL A202 Masterpieces of World Literature II **3 Credits**

Introductory course for majors and non-majors. Emphasizes world literatures from the 17th century to the present and teaches essential vocabulary, the development of critical thinking, and the analysis of global and historical perspectives.

Prerequisites: WRTG A111 with a minimum grade of C or WRTG A1W with a minimum grade of C or WRTG A2W with a minimum grade of C or WRTG A3W with a minimum grade of C or Enhanced ACT English with a score of 30 or SAT Critical Reading Score with a score of 620 or SAT Verbal Score with a score of 620.

Attributes: UAA Humanities GER.

ENGL A259 Short Format: Introduction to Creative Writing **1 Credit**

Introduction to one creative writing genre in short 1-credit workshops.

Special Note: May be repeated twice for credit with change of subtitle.

ENGL A260 Introduction to Creative Writing **3 Credits**

Introduction to creative writing in multiple genres. Reading fiction, nonfiction and poetry; analysis of stylistic features; participation in writing workshop; and production of written exercises and texts.

Special Note: May be repeated once for credit.

Prerequisites: WRTG A111 with a minimum grade of C.

ENGL A301 Literature of Britain I **3 Credits**

Study of significant writers of Britain from Anglo-Saxon times to the Restoration.

Prerequisites: WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C.

Attributes: UAA Humanities GER.

ENGL A302 Literature of Britain II **3 Credits**

Study of significant writers of Britain from the Restoration to the present.

Prerequisites: WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C.

Attributes: UAA Humanities GER.

ENGL A306 Literature of the United States I **3 Credits**

Studies writers of the United States focusing primarily on the 19th century and including literature that reflects cultural, historical, political, and aesthetic forces.

Prerequisites: WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C or WRTG A306 with a minimum grade of C.

Attributes: UAA Humanities GER.

ENGL A307 Literature of the United States II **3 Credits**

Studies writers of the United States focusing primarily on the 20th century and including literature that reflects cultural, historical, political, and aesthetic forces.

Prerequisites: WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C or WRTG A2W with a minimum grade of C.

Attributes: UAA Humanities GER.

ENGL A309 Texts of American Cultures and Regions **3 Credits**

Intensive study of the texts of an American culture or region from the beginnings to the present day, with emphasis on major figures within their historical context.

Special Note: May be repeated once for credit with a change in the subtitle.

Prerequisites: WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C.

ENGL A310 Ancient Literature **3 Credits**

Selected Biblical texts and Classical Western and ancient Asian literature in English translations.

Prerequisites: WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C.

Attributes: UAA Humanities GER.

ENGL A311 Writing and Rhetoric in Public Life **3 Credits**

Advanced rhetorical problem solving and writing to engage public issues.

Prerequisites: WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C.

ENGL A312 Advanced Technical Writing 3 Credits

Advanced study of technical writing principles, practices and genres. Extensive practice in designing, revising and editing print and electronic documents.

Special Note: May include fees if delivered in a computerized classroom.

Registration Restrictions: WRTG A212 recommended

Prerequisites: WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C or WRTG A2W with a minimum grade of C.

ENGL A313 Professional Writing 3 Credits

Instruction in writing for a profession, focusing on the various genres and on the technological, cultural, and social aspects of a selected profession. Concentration on acquiring workplace literacy through analysis and composition of workplace genres, through mastery of relevant technologies (e.g., web-development software, word processing software, spreadsheet software), and through analysis of worksites.

Special Note: May include special fees if delivered in a computerized classroom.

Prerequisites: WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C.

ENGL A315 Survey of Medieval Literature 3 Credits

A selective survey of primarily Western literature from the fifth century through the fifteenth. Representative authors and genres.

Registration Restrictions: Upper-division standing recommended.

Prerequisites: ENGL A201 with a minimum grade of C and ENGL A202 with a minimum grade of C.

ENGL A320 Renaissance Literature 3 Credits

A selective survey of Western literature from the fifteenth century through the middle of the seventeenth. Representative authors and genres.

Prerequisites: ENGL A201 with a minimum grade of C and ENGL A202 with a minimum grade of C.

ENGL A325 Neoclassical Literature 3 Credits

A selective survey of primarily British literature of the period 1660-1798.

Prerequisites: ENGL A201 and ENGL A202.

ENGL A330 Literature of Romanticism 3 Credits

A study of the Romantic movements from late eighteenth century to mid-nineteenth century.

Prerequisites: ENGL A201 and ENGL A202.

ENGL A340 The Victorian Period 3 Credits

A multi-genre survey of selected literature of the Victorian period with special attention paid to historical and cultural contexts.

Prerequisites: (ENGL A201 with a minimum grade of C or ENGL A202 with a minimum grade of C).

ENGL A343 Modern and Contemporary Literature 3 Credits

Study of representative literary works from the twentieth and twenty-first centuries. Includes selections from U.S. and international literatures.

Prerequisites: ENGL A201 or ENGL A202 or WRTG A211.

ENGL A351 Poetry 3 Credits

An intensive study of the forms and techniques used by poets.

Prerequisites: ENGL A201 and ENGL A202.

ENGL A352 Writers' Workshop: Poetry 3 Credits

Introduction to techniques of writing poetry, with instructor-guided peer critique of each student's work.

Special Note: May be repeated once for credit.

Prerequisites: WRTG A111 with a minimum grade of C and ENGL A260 with a minimum grade of C.

ENGL A361 The Novel 3 Credits

Intensive study of the forms and techniques used by novelists within the framework of a historically developing genre.

Prerequisites: ENGL A201 or ENGL A202 or WRTG A211.

ENGL A362 Writers' Workshop: Fiction 3 Credits

Introduction to techniques of writing fiction, with intensive critique of each student's work.

Special Note: May be repeated once for credit.

Prerequisites: WRTG A111 with a minimum grade of C and ENGL A260 with a minimum grade of C.

ENGL A363 Short Story 3 Credits

An examination of the development of the short story as a separate genre and an intensive study of the techniques used by writers in this form.

Prerequisites: ENGL A201 and ENGL A202.

ENGL A371 Narrative Nonfiction 3 Credits

A study of the exemplars of narrative nonfiction such as collected correspondence, essay, memoir, biography, autobiography, journal, new journalism, travel narrative, science and nature writing, jeremiad, weblog. These may be drawn from a variety of historical contexts.

Prerequisites: (ENGL A121 or ENGL A201 or ENGL A202) and (WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C).

ENGL A372 Writers' Workshop: Nonfiction 3 Credits

Study of creative nonfiction including analysis of representative texts and practice in writing nonfiction.

Special Note: May be repeated once for credit.

Prerequisites: WRTG A111 with a minimum grade of C and ENGL A260 with a minimum grade of C.

ENGL A381 Drama 3 Credits

An intensive study of the forms and techniques used by dramatists, including significant criticism from Aristotle to the present.

Prerequisites: ENGL A201 with a minimum grade of C and ENGL A202 with a minimum grade of C.

ENGL A383 Film Interpretation 3 Credits

An intensive study of the forms and techniques used in film. Includes an introduction to film theory and criticism.

Prerequisites: WRTG A211 or WRTG A211 or WRTG A212 or WRTG A212 or WRTG A213 or WRTG A213 or WRTG A214 or WRTG A214.

Attributes: UAA Humanities GER.

ENGL A385 Creative Writing Workshop 3 Credits

Provides creative writing practice at the intermediate level, with intensive critique of student work in fiction, nonfiction, poetry or drama.

Prerequisites: (WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C) and (ENGL A201 with a minimum grade of C or ENGL A202 with a minimum grade of C or ENGL A260 with a minimum grade of C or ENGL A301 with a minimum grade of C or ENGL A302 with a minimum grade of C or ENGL A306 with a minimum grade of C or ENGL A307 with a minimum grade of C or ENGL A310 with a minimum grade of C or ENGL A445 with a minimum grade of C).

ENGL A391 Genres of Subject and Theme 3 Credits

Study of genre defined in terms of subject or theme rather than form. Examples include captivity narrative, utopian literature, science fiction, adolescent literature.

Special Note: Applies once toward the genre requirement for literature track in the English major. May be repeated once for elective credit with a change of subtitle.

Prerequisites: WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C.

ENGL A404 Topics in Women's Literature 3 Credits

Study of particular topics in literature by women writers.

Special Note: May be repeated once with a change in topic.

Prerequisites: ENGL A201 with a minimum grade of C or ENGL A202 with a minimum grade of C or WRTG A211 with a minimum grade of C.

ENGL A414 Research Writing 3 Credits

A guided deep revision of a research paper from a student's home discipline, adapted to a specific scholarly or professional audience. Concentration on audience, method, argument, evidence, and style.

Special Note: Repeatable once with a new research project.

May Be Stacked With: ENGL A614

Prerequisites: WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C or WRTG A2W with a minimum grade of C.

ENGL A424 Shakespeare 3 Credits

Major works and a survey of Shakespearean criticism. Plays covered vary from semester to semester.

Prerequisites: ENGL A201 with a minimum grade of C and ENGL A202 with a minimum grade of C.

ENGL A429 Major Authors 3 Credits

Intensive cross-disciplinary study of a single writer or of a small connected movement among writers.

Special Note: May be repeated once for credit with a change of subtitle.

Prerequisites: (ENGL A201 with a minimum grade of C or ENGL A202 with a minimum grade of C or LING A101 with a minimum grade of C or LING A201 with a minimum grade of C) and (WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C).

ENGL A433 Literacy, Rhetoric and Social Practice 3 Credits

A survey of literacy and rhetoric as socially embedded practices within the larger discursive and material contexts of human activity. Explores literacy as the construction of meaning in professional, public and private settings, including print-based reading and writing as well as other modes of representation. Explores rhetoric as the production and interpretation of texts for specific audiences in social contexts.

Prerequisites: (ENGL A201 with a minimum grade of C or ENGL A202 with a minimum grade of C) and (WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C).

ENGL A434 Rhetoric and Composition Research Theories and Methodologies 3 Credits

Study of selected rhetoric and composition research theories and methodologies. Emphasis on principles, purposes, types of evidence, and challenges associated with selected theories and methodologies.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing.

Prerequisites: WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C.

ENGL A435 Critical Theory 3 Credits

Study of critical theory with an emphasis on historical continuity and change.

Special Note: Does not fulfill degree requirements for the MA in English.

May Be Stacked With: ENGL A635

Prerequisites: ENGL A201 with a minimum grade of C and ENGL A202 with a minimum grade of C.

ENGL A437 Studies in Style and Stylistics 3 Credits

Current topics in analysis of linguistic choices in literary texts.

Special Note: May be repeated once for credit with department approval.

May Be Stacked With: ENGL A637

Prerequisites: (ENGL A201 with a minimum grade of C or ENGL A202 with a minimum grade of C) and (WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C or WRTG A2W with a minimum grade of C).

ENGL A440 Topics in Comparative Literature 3 Credits

Comparative analysis of selected texts from modern and contemporary international literatures. Includes readings in poetics and literary history.

Special Note: May be repeated once for degree credit with a change of subtitle.

Prerequisites: ENGL A201 or ENGL A202.

ENGL A444 Topics in Native Literatures 3 Credits

In-depth studies of particular topics in Native literatures. Primary emphasis on American Indian and Alaska Native literatures, but topics may sometimes focus upon other indigenous world literatures.

Special Note: Applies once towards requirement for English majors; may be repeated once for elective credit with a change of subtitle.

Prerequisites: WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C.

ENGL A445 Alaska Native Literatures 3 Credits

Study of traditional, historical stories and contemporary texts written in English by Alaska Natives.

Prerequisites: WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C.

Attributes: UAA Humanities GER.

ENGL A450 Linguistics and English Language Teaching 3 Credits

Surveys linguistic principles and methods for teachers of English, ESL, and literacy. Addresses English language structure and variation in both spoken and written contexts. Emphasis on developing practical teaching techniques.

Prerequisites: LING A101 with a minimum grade of C or LING A201 with a minimum grade of C.

ENGL A474 Sociolinguistics 3 Credits

Investigates the relationships between language variation and social structures, and addresses theories and methods of sociolinguistic research, with a focus on the production and perception of linguistic variation.

Prerequisites: WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C.

ENGL A476 History of English Language 3 Credits

Investigates origins, development, and variation of the English language from linguistic, social, literary, and technological perspectives. Relates history and variation in English to contemporary issues about language.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior or senior standing.

Prerequisites: (ENGL A201 with a minimum grade of C or ENGL A202 with a minimum grade of C) and (WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C) and HIST A101 and HIST A102.

Attributes: UAA Integrative Capstone GER.

ENGL A478 Public Science Writing 3 Credits

Focuses on rhetorical issues at the intersections of discourse, science, and citizenry, issues involving citizens' understanding, awareness, and participation in science-based public policy. Traces historical efforts to define and develop scientific literacy and concentrates on the increasing dialogue and debate among scientists, the public, and policymakers.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills), junior standing, and 4 credits of Natural Science GER, including one lab credit.

Prerequisites: WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C.

Attributes: UAA Integrative Capstone GER.

ENGL A483 Composition, Literacy and the Teaching of Writing 3 Credits

Focuses on practical strategies for teaching literacy and composition in the context of theoretical issues and guides students to begin developing their own reflective pedagogies.

Special Note: Not available for credit to students who have completed ENGL A683.

May Be Stacked With: ENGL A683

Prerequisites: WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C.

ENGL A487 Professional Editing 3 Credits

Focuses on principles and practical applications of professional editing in business, government, non-profit and academic settings. Emphasizes linguistic, rhetorical, historical and social aspects of editing print-based and electronic texts.

Prerequisites: WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C.

ENGL A490 Topics in English Studies 3 Credits

Current topics in English literature, composition, rhetoric or linguistics. Topics will vary.

Special Note: May be repeated for a maximum of 9 credits with change of subtitle. Not available for credit to students who have completed ENGL A690 with the same subtitle.

May Be Stacked With: ENGL A690

Prerequisites: (ENGL A201 with a minimum grade of C or ENGL A202 with a minimum grade of C) and (WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C).

ENGL A495 Internship in Professional Writing 1-6 Credits

Advanced application of writing skills in a professional setting.

Special Note: May be repeated for up to 6 credits with change in setting and/or responsibilities or change in venue.

Registration Restrictions: Faculty permission

Prerequisites: WRTG A211 with a minimum grade of B or WRTG A212 with a minimum grade of B or WRTG A213 with a minimum grade of B or WRTG A214 with a minimum grade of B.

ENGL A499 English Honors Thesis 3 Credits

Individual in-depth study of a selected topic, resulting in a thesis.

Registration Restrictions: Completion of 6 credits of 400-level topics courses with grade of A (ENGL A404, ENGL A429, ENGL A440, ENGL A444, ENGL A490).

ENGL A601 Introduction to Graduate Studies in English 3 Credits

Advanced study and practice of the skills required for graduate studies in English. Involves analysis of the nature and scope of the discipline, as well as bibliographical and primary research methodologies.

Registration Restrictions: Graduate standing

ENGL A602 Contemporary Literary Theory 3 Credits

Overview of major types of literary theory currently practiced in American research universities. Examines their specific role in shaping English departments and programs and their particular function in defining literary studies.

Registration Restrictions: Graduate standing.

ENGL A610 Studies in Literary Periods and Movements 3 Credits

Advanced study of selected topics within particular literary periods and/or movements.

Special Note: May be repeated once for degree credit with a change of subtitle.

Registration Restrictions: Graduate standing.

ENGL A611 Studies in Genre 3 Credits

With specific subtitles for each offering, the course focuses on issues of genre--for example, poetry, fiction, drama, narrative nonfiction, oratory--in the study of literary and rhetorical texts.

Special Note: May be repeated once for degree credit with a change of subtitle.

Registration Restrictions: Graduate standing.

ENGL A612 Studies in English Linguistics 3 Credits

Advanced study of particular topics, trends, and issues in linguistics of the English language.

Special Note: May be repeated once for degree credit with a change of subtitle.

Registration Restrictions: Graduate standing.

ENGL A613 Studies in Rhetoric and Composition 3 Credits

An investigation into significant historical and/or contemporary developments in rhetorical theory and practice, which may also include composition, literacy studies, or linguistics.

Special Note: May be repeated once for degree credit with a change of subtitle.

Registration Restrictions: Graduate standing.

ENGL A614 Advanced Research Writing 3 Credits

Guides development of a graduate research project/proposal for a selected audience. Concentration on inquiry, method, argument, evidence and style.

Registration Restrictions: Graduate-level standing

May Be Stacked With: ENGL A414

ENGL A635 Advanced Critical Theory 3 Credits

Advanced study and application of critical theory with an emphasis on historical continuity and change.

Registration Restrictions: Graduate standing

May Be Stacked With: ENGL A435

ENGL A636 Studies in Contemporary Theory 3 Credits

Advanced study of key thinkers, major schools, or central topics in contemporary literary, rhetorical, or linguistic theory and practice.

Special Note: May be repeated once for degree credit with a change of subtitle.

Registration Restrictions: Graduate standing.

ENGL A637 Advanced Studies in Style and Stylistics 3 Credits

Current topics in analysis and implementation of styles and stylistic techniques in literary texts.

Special Note: May be repeated once for credit with a change of subtitle.

Registration Restrictions: Graduate standing

May Be Stacked With: ENGL A437

ENGL A676 Studies in Texts and Cultures 3 Credits

Advanced study of relationships between cultural forces and the production, reception, and interpretation of texts. Focuses on both theory and analysis of selected texts.

Special Note: May be repeated once for degree credit with a change of subtitle.

Registration Restrictions: Graduate standing.

ENGL A683 Composition Theory and Pedagogy 3 Credits

Investigates origin, foundational philosophies, theoretical movements, and pedagogical practices in composition studies, including direct observation in college classrooms and tutorial settings.

Special Note: Required course for teaching assistants. Not available for credit to students who have taken ENGL A483.

Registration Restrictions: Graduate standing

May Be Stacked With: ENGL A483

ENGL A687 Composition Theory and Practice 3 Credits

Study of theories and methods of teaching composition. Includes introduction to concepts underlying different approaches to composition, applications to practical pedagogy and contemporary rhetorical issues.

Special Note: Required core course for teaching assistants.

Registration Restrictions: Graduate standing

ENGL A689 Advanced Research and Professional Practices 3 Credits

Advanced practicum in academic research, disciplinary writing, and professional practices. Students evaluate disciplinary journals, research the state of an academic question, trace the history of discussion of a specific argument, compile an annotated bibliography, analyze disciplinary arguments, practice appropriate academic style, and develop a thesis proposal.

Registration Restrictions: Formal admission to MA in English; permission of graduate advisor.

Prerequisites: ENGL A602.

ENGL A690 Advanced Topics in English Studies 3 Credits

Advanced study of current topics in English literature, composition, rhetoric or linguistics. Topics will vary.

Special Note: May be repeated for a maximum of 9 credits with a change of subtitle. Not available for credit to students who have completed ENGL A490 with the same subtitle.

Registration Restrictions: Graduate standing

May Be Stacked With: ENGL A490

ENGL A695 Internship in English **1-6 Credits**

Advanced internship in English-related professional context.

Special Note: May be repeated for up to 6 credits with change in setting and/or responsibilities.

Registration Restrictions: Graduate standing and instructor permission.

ENGL A698 Individual Research **1-6 Credits**

Students work individually with faculty mentors to research a topic of the students' choice, generally in preparation for the MA thesis.

Special Note: May be repeated for a maximum of 6 credits.

Registration Restrictions: Graduate standing and faculty permission.

ENGL A699 Thesis **1-6 Credits**

Students work individually with a faculty mentor to research and write the master's thesis, a thoroughly researched and carefully argued article-length work that demonstrates the student's academic achievement and is suitable for academic presentation.

Special Note: May be repeated for a maximum of 6 credits.

Registration Restrictions: Graduate standing, faculty permission, and an approved thesis proposal.

Prerequisites: ENGL A689 with a minimum grade of B.

Environmental Studies (ENVI)

Courses

ENVI A111 Earth Systems: Elements of Physical Geography **3 Credits**

Survey of the processes that form the physical environment and the resulting physical patterns. Study of landforms, climate, soils, water resources, vegetation and their world and regional patterns.

Crosslisted With: GEOG A111

Attributes: UAA Natural Sciences GER.

ENVI A211 Environmental Science: Systems and Processes **3 Credits**

Introduces science as a powerful but limited tool for understanding and solving environmental problems. The Earth is discussed as a system with feedbacks, interrelationships, cycles and flows that is undergoing natural and human-induced changes. Topics include basic ecology and biogeochemistry, natural hazards, resources the environment provides to humans, and current environmental issues. Uses Alaskan, Arctic and other regional examples.

Prerequisites: WRTG A111 with a minimum grade of C and (MATH A105 with a minimum grade of C or MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C or MATH A155 with a minimum grade of C or MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C).

Attributes: UAA Natural Sciences GER.

ENVI A211L Environmental Science: Systems and Processes**Laboratory 1 Credit**

Laboratory introducing students to the systematic acquisition of data and its analysis and interpretation in a manner consistent with the disciplines of environmental studies. This includes field and classroom experiences and the use of remotely sensed data and geographic information systems in interpretation, analysis and presentation. Themes include scientific method, map use, environmental problems at multiple scales, climate, resources and resource stress, and natural hazards.

Prerequisites: WRTG A111 with a minimum grade of C and (MATH A105 with a minimum grade of C or MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C or MATH A155 with a minimum grade of C or MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C).

Attributes: UAA Natural Sci Lab Only GER.

ENVI A212 Living on Earth: Introduction to Environmental Studies **3 Credits**

Examines relationships between people and their environment. Considers environmental problems, potential solutions, and the social and ecological impacts of our daily choices as citizens and consumers.

Prerequisites: ENVI A211 with a minimum grade of C.

Attributes: UAA Social Sciences GER.

ENVI A280 Professional Preparation in Environmental Fields I **1 Credit**

A professional preparation course that will guide students in professional preparation through their academic program, begin the development of professional portfolios, introduce internship opportunities, encourage the pursuit of undergraduate research opportunities and assist in planning for graduate school.

May Be Stacked With: ENVI A480

Prerequisites: ENVI A212 or concurrent enrollment.

ENVI A370 Environmental Field Methods **3 Credits**

Introduces methods of data collection and basic analysis for environmental studies. Focuses on the development of quantitative skills and tools used in science professions, with a particular emphasis on field-based data collection techniques. Combines hands-on outdoor field labs with classroom-based analysis and group presentations.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and sophomore standing

Prerequisites: ENVI A211 with a minimum grade of C and ENVI A211L with a minimum grade of C and (STAT A200 with a minimum grade of C or concurrent enrollment or STAT A253 with a minimum grade of C or concurrent enrollment).

ENVI A395 Environmental Studies Internship **3-9 Credits**

Intensive experience applying environmental studies disciplinary knowledge and skills in a professional setting. Internships will be completed with a community partner (such as an agency or private organization) that engages in environmentally based work.

Special Note: May be repeated for a maximum of 9 credits.

Registration Restrictions: Instructor permission required.

Prerequisites: ENVI A211.

ENVI A470 Environmental Planning and Problem Solving **4 Credits**
Examination of methodological concepts and issues in environmental planning and problem-solving. Includes the content and structure of Environmental Impact Assessment (EIA); approaches to EIA with reference to the assessment of impacts on biophysical and social systems. Involves substantial practical work, including hands-on exercises, writing, and oral presentations.

Prerequisites: COMM A241 and (WRTG A212 or WRTG A213) and ENVI A211 and ENVI A211L and ENVI A212 and (STAT A200 or STAT A253).

Attributes: UAA Integrative Capstone GER.

ENVI A480 Professional Preparation in Environmental Fields II **1 Credit**

A professional preparation course that will require students to report on their internships and undergraduate research, systematically reflect on their degree program, and develop career and academic plans.

Registration Restrictions: Environment and society major

May Be Stacked With: ENVI A280

Prerequisites: ENVI A280 with a minimum grade of C and ENVI A395 with a minimum grade of C and ENVI A470 with a minimum grade of C.

ENVI A490 Topics in Environment and Society **3 Credits**

A seminar focusing on approaches and practices for addressing social concerns related to environmental problems.

Special Note: May be repeated twice with change of subtitle.

Prerequisites: ENVI A211 or ENVI A212.

ENVI A498 Directed Research **2-6 Credits**

Student research conducted on specific topic in environmental studies and/or science. Research topic to be approved and directed by a faculty member in the Department of Geography and Environmental Studies.

Special Note: May be repeated for a maximum of 6 credits.

Registration Restrictions: Faculty permission

ENVI A499 Senior Thesis **3 Credits**

Independent research culminating in the completion of a senior thesis in environmental studies and/or science. Research topic to be approved and directed by a faculty member in the Department of Geography and Environmental Studies.

Special Note: May be repeated for a maximum of 6 credits.

Registration Restrictions: Senior standing and faculty permission

Film (FLM)

Courses

FLM A167 Introduction to the Study of Adventure Filmmaking **3 Credits**

Introduces students to various forms and elements of successful adventure and documentary films, with a special emphasis in identifying and appreciating humanistic and artistic qualities. Students will survey the history of outdoor adventure filmmaking and, after learning introductory skills and perspectives in film study and critical evaluation, explore general techniques, stylistic approaches, best practices, and the function and role of this specialized film genre.

FLM A172 Previsualization and Preproduction **3 Credits**

Previsualization is a collaborative process that generates preliminary versions of shots or sequences that will eventually create a larger story. It enables filmmakers to explore creative ideas, plan efficient technical solutions and communicate a shared vision. Laying a foundation for production, this course will explore writing, storyboarding and film production. This focus on developing original stories and preparing those concepts for production.

FLM A180 Digital Video Editing **3 Credits**

Introduction to the technical and aesthetic aspects of nonlinear digital video editing. Students will go from little or no experience in nonlinear editing to being comfortable with some of the advanced editing techniques. Addresses filmmaking editing strategies that are not bound to time or specific editing technology.

FLM A298 Adventure Film Research **1-3 Credits**

Hands-on filmmaking research from direct engagement with a film project or process. Each student will contribute a film product or research portfolio.

Registration Restrictions: Instructor permission

Prerequisites: FLM A172.

Fire Science (FIRE)

Courses

FIRE A101 Principles of Emergency Services **3 Credits**

Provides overview of fire protection and emergency services (ES).

Includes introduction to the history and development of the fire service, as well as careers in fire and emergency service.

FIRE A105 Fire Prevention **3 Credits**

Provides fundamental knowledge relating to the field of fire prevention. Topics include history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use and application of codes and standards, review of prevention plans, fire inspections, fire and life safety education, and fire investigation.

FIRE A107 Strategy and Tactics of Fire Suppression **3 Credits**

Provides the principles of fire ground control through utilization of personnel, equipment and extinguishing agents.

Prerequisites: FIRE A101 with a minimum grade of C.

FIRE A111 Principles of Fire and Emergency Service Administration **3 Credits**

Introduces organization and management of a fire and emergency services department and the relationship of government agencies to the fire services. Emphasis is placed on fire and emergency service, ethics, and leadership from the perspective of the company officer.

Prerequisites: FIRE A101 with a minimum grade of C.

FIRE A117 Rescue Practices 3 Credits

Introduces rescue problems, techniques, and equipment. Includes SCBA use, urban search and rescue, scene safety, motor vehicle crashes, technical rescue, water, swift water, and ice rescue, mass casualty incidents, and heavy rescue.

Special Note: Students must be physically capable of performing rescue skills and must be currently certified as an Emergency Trauma Technician or an Emergency Medical Technician.

Registration Restrictions: Departmental approval

Prerequisites: EMT A110 or EMT A130.

FIRE A121 Fire Behavior and Combustion 3 Credits

Explores the theories and fundamentals of how and why fires start, spread, and are controlled.

Prerequisites: MATH A105 with a minimum grade of C or concurrent enrollment.

FIRE A123 Fire Investigation I 3 Credits

Provides the student with the fundamentals and technical knowledge needed for proper fire scene interpretations, including recognizing and conducting origin and cause, preservation of evidence and documentation, scene security, motives of the fire setter, and types of fire causes.

Prerequisites: FIRE A101 with a minimum grade of C and FIRE A121 with a minimum grade of C.

FIRE A131 Firefighter I, Series I 3 Credits

Presents fundamental knowledge of fire behavior, fire organizations, types of fire equipment, emergency response services processes, and methods of their use. Includes orientation, safety, fire behavior, building construction, protective clothing, and self-contained breathing apparatus (SCBA).

Special Note: Successful completion of all four Firefighter I series will qualify/prepare the student to sit for Alaska State Fire Fighter I certification exam. All students are required to wear a complete set of fire department approved protective clothing (turnout gear) during skills training. (Turnout gear provided)

FIRE A133 Firefighter I, Series II 3 Credits

Introduces the fundamental knowledge of fire behavior, fire organizations, types of fire equipment, emergency services processes and methods of their use. Includes portable extinguishers, ropes and knots, building search, victim removal, forcible entry tools, construction, techniques, and ground ladders.

Special Note: Successful completion of all four Firefighter I series will qualify/prepare the student to sit for Alaska State Fire Fighter I certification exam. All students are required to wear a complete set of fire department approved protective clothing (turnout gear) during skills training. (Turnout gear provided)

Prerequisites: FIRE A131.

FIRE A135 Firefighter I, Series III 3 Credits

Provides fundamental knowledge of fire behavior, fire organizations, types of fire equipment, emergency response services processes, and methods of their use. Includes ventilation, water supply, hose rolling, coupling, loading, carrying, advancing, laying, and water fire streams.

Special Note: Successful completion of all four Firefighter I series will qualify/prepare the student to sit for Alaska State Fire Fighter I certification exam. All students are required to wear a complete set of fire department approved protective clothing (turnout gear) during skills training. (Turnout gear provided)

Prerequisites: FIRE A133.

FIRE A137 Firefighter I, Series IV 3 Credits

Provides fundamental knowledge of fire behavior, fire organizations, types of fire equipment, emergency response services processes, and methods of their use. Includes wildland fire control, classes of fire, vehicle fires, sprinkler systems, salvage, overhaul, fire cause, communications equipment and techniques, fire prevention, and public fire education.

Special Note: Successful completion of all four Firefighter I series will qualify/prepare the student to sit for Alaska State Fire Fighter I certification exam. All students are required to wear a complete set of fire department approved protective clothing (turnout gear) during skills training. (Turnout gear provided)

Prerequisites: FIRE A135.

FIRE A151 Wildland Fire Control I 3 Credits

Provides entry level and experienced firefighters with fundamental knowledge of wildland fire organization, fire behavior, air operations, suppression methods, safety, ICS, portable pumps, water use and wildfire chainsaw operations.

Special Note: Successful course completion combined with physical fitness requirements may qualify the student for an Interagency Fire Qualification Card (Red Card) with a rating of "Firefighter."

FIRE A170 Occupational Safety and Health for Emergency Services 3 Credits

Introduces the basic concepts of occupational health and safety as they relate to emergency service organizations. Topics include risk and hazard evaluation and control procedures for emergency service organizations.

FIRE A190 Selected Topics in Fire and Emergency Services 1-3 Credits

Covers various topics in fire and emergency services technology. Course content is determined by student or industry needs.

Special Note: Course may not be repeated with same title.

Registration Restrictions: Departmental approval

FIRE A201 Principles of Emergency Management 3 Credits

Examines the history of emergency management. Identifies and determines risk assessments for natural and technological hazards. Identifies and assesses the disciplines of emergency management. Examines international disaster management, emergency management and terrorism, and discusses the future of emergency management.

Prerequisites: FIRE A101.

FIRE A202 Fire Protection Hydraulics and Water Supply 3 Credits

Provides a foundation of theoretical knowledge in order to understand the principles of the use of water in fire protection and to apply hydraulic principles to analyze and to solve water supply problems.

Prerequisites: FIRE A101 with a minimum grade of C and FIRE A121 with a minimum grade of C.

FIRE A206 Building Construction Issues Related to Fire Protection 3 Credits

This course examines building construction and design related to firefighter and life safety.

Prerequisites: FIRE A101 with a minimum grade of C and FIRE A121 with a minimum grade of C.

FIRE A214 Fire Protection Systems 3 Credits

Provides information relating to the features of design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection and portable fire extinguishers.

Prerequisites: FIRE A101 with a minimum grade of C and FIRE A105 with a minimum grade of C and FIRE A121 with a minimum grade of C.

FIRE A220 Legal Aspects of Emergency Services 3 Credits

Introduces the federal, state and local laws that regulate emergency services including review of national standards, regulations and consensus standards.

Prerequisites: WRTG A111 with a minimum grade of C or concurrent enrollment.

FIRE A221 Principles of Fire and Emergency Services Safety and Survival 3 Credits

Introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavioral change throughout the emergency services.

Prerequisites: FIRE A101 with a minimum grade of C and FIRE A121 with a minimum grade of C.

FIRE A230 Fire Department Organizational Theory and Behavior 3 Credits

Exposes the student to fire department organizational theory and behavior. Examines various theories developed to explain and predict employee behavior in an organizational context. Develops analytical thinking capabilities by comparing and contrasting conflicting theories of organizations.

Prerequisites: FIRE A101.

FIRE A231 Firefighter II 4 Credits

Introduces advanced firefighting operations and fundamentals including: incident management, evidence protection and incident reports; communications, foam operations, flammable liquid and gas fires, vehicle extrication, special rescue teams, fire safety and pre-incident surveys and training; equipment maintenance and testing.

Special Note: Successful completion will qualify and prepare the student to sit for Alaska State Firefighter II certification exam. All students are required to wear a complete set of fire department approved protective clothing (turnout gear) during skills training. Turnout gear provided.

Prerequisites: FIRE A137.

FIRE A295 Fire and Emergency Services Practicum 3 Credits

Provides an opportunity to observe, participate and apply firefighting, emergency medical or emergency management skills in a structured and supervised organizational setting.

Registration Restrictions: Departmental approval

Prerequisites: FIRE A101 with a minimum grade of C and (EMT A110 with a minimum grade of C or EMT A130 with a minimum grade of C or FIRE A121 with a minimum grade of C or FIRE A201 with a minimum grade of C).

French (FREN)

Courses

FREN A101 Elementary French I 4 Credits

Introductory course for students with no previous knowledge of the French language. Develops listening, speaking, reading, and writing skills in French for effective communication at the elementary level. Students gain understanding of basic cross-cultural perspectives. Course conducted in French.

Attributes: UAA Humanities GER.

FREN A102 Elementary French II 4 Credits

Continuation of introductory course. Further develops elementary listening, speaking, reading, and writing skills in French for effective communication. Enhances appreciation of cross-cultural perspectives. Course conducted in French.

Prerequisites: FREN A101.

Attributes: UAA Humanities GER.

FREN A201 Intermediate French I 4 Credits

Intermediate course for students with basic knowledge of French. Enhances listening, speaking, reading, and writing skills for effective communication at the intermediate level. Students critically examine diverse cultural perspectives. Course conducted in French.

Prerequisites: FREN A102.

Attributes: UAA Humanities GER.

FREN A202 Intermediate French II 4 Credits

Continuation of first semester in intermediate French. Further develops listening, speaking, reading, and writing proficiency for effective communication and in preparation for advanced study of French. Students interpret diverse cultural perspectives. Course conducted in French.

Prerequisites: FREN A201.

Attributes: UAA Humanities GER.

FREN A301 Advanced French I 4 Credits

Advanced French course in refining listening, speaking, reading, writing, and analytical skills for effective interaction in communicatively complex situations. Students critically analyze diverse cultural topics.

Special Note: Course conducted in French.

Registration Restrictions: If prerequisite not met, students can gain entrance to course with departmental approval.

Prerequisites: FREN A202 with a minimum grade of C.

Attributes: UAA Humanities GER.

FREN A302 Advanced French II 4 Credits

Continuation of first semester in advanced French. Further refines listening, speaking, reading, writing, and analytical skills for effective interaction in communicatively complex situations. Students critically analyze diverse cultural topics.

Special Note: Course conducted in French.

Registration Restrictions: If prerequisite not met, students can gain entrance to course with departmental approval.

Prerequisites: FREN A301 with a minimum grade of C.

Attributes: UAA Humanities GER.

FREN A306 Advanced French Conversation and Composition 1-3 Credits

Speaking and writing about French and Francophone countries, their peoples, customs and cultures.

Special Note: May be offered in 1-, 2- or 3-credit segments. May be repeated for a maximum of 9 credits with change of subtitle. Up to 3 credits may count toward a minor or major in languages with an emphasis in French. Course conducted in French.

Prerequisites: FREN A202.

FREN A310 Selected Topics: Literary Trends and Traditions 3 Credits

Focuses on diverse literary traditions of multiple French-speaking communities. Critical analysis through a variety of disciplinary methodologies (e.g. historical, cultural, artistic); terminology also explored and developed. Enhances French language skills in writing, reading, speaking, listening and cultural literacy.

Special Note: May be repeated for credit with a change of subtitle. Course conducted in French.

Prerequisites: FREN A302 with a minimum grade of C.

FREN A432 Selected Topics: Studies in French/Francophone Literature and Culture 3 Credits

Focuses on the intensive study of authors, literary movements, periods and genres in their historical and cultural contexts. Enhances French language skills in reading, listening, writing, speaking and cultural literacy.

Special Note: May be repeated for credit with a change in subtitle. Course conducted in French.

Prerequisites: FREN A302 with a minimum grade of C.

Geographic Information Systems (GIS)

Courses

GIS A101 Introduction to Geographic Information Systems 3 Credits

Introduces the concepts and practical skills of geographic information systems (GIS). Covers digital representation of geographic objects, data sources, data input and manipulation, map projection and coordinate systems, data management and analysis, and mapping and presentation of geographic information.

GIS A201 Intermediate Geographic Information Systems 3 Credits

Introduces theoretical and practical examination of analytical methods used in advanced GIS. Topics include georeferencing, spatial analysis and inference, geospatial database, network analysis, and spatial modeling and visualization.

Prerequisites: GIS A101 with a minimum grade of C and (MATH A152 with a minimum grade of C or MATH A155 with a minimum grade of C or MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C).

GIS A301 Spatial Data Structures 3 Credits

Introduces fundamental concepts of geospatial data structures as well as methods and algorithms for manipulation of geospatial data. Covers geospatial vector and raster data, surfaces, and networks.

Prerequisites: GIS A201 with a minimum grade of C.

GIS A351 Remote Sensing 3 Credits

Introduces principles of image formation, electromagnetic spectrum, imaging systems, photo interpretation and image classification using image analysis software.

Prerequisites: GIS A201 with a minimum grade of C or concurrent enrollment.

GIS A370 GIS and Remote Sensing for Natural Resources 3 Credits

Introduces the principles and terminology of natural resources, landscape ecology and ecosystem management. Develops students' analytical skills using spatial technologies consisting of geographic information systems (GIS), remote sensing and global positioning systems (GPS) as tools to gain knowledge of landscape form and function.

Prerequisites: GIS A351 with a minimum grade of C.

GIS A458 Spatial Data Management 3 Credits

Presents the geospatial database technology underlying geographic information systems. Topics include spatial data models, querying, implementation of relational and spatial operators, and system architecture for geospatial databases.

Prerequisites: GIS A201 with a minimum grade of C.

GIS A466 Spatial Analysis 3 Credits

Introduces theoretical foundation for, and practical application of, the statistical analysis of spatial data. Topics include characterization of spatial data, techniques for visualizing, exploring and modeling spatial data distributed as point patterns, continuous data, area data, and spatial interaction data.

Prerequisites: GIS A201 with a minimum grade of C and STAT A253 with a minimum grade of C.

GIS A467 Image Analysis 3 Credits

Introduces principles of digital image processing, multi-temporal image analysis, change detection and spatio-temporal geo-visualization.

Prerequisites: GIS A351 with a minimum grade of C and STAT A253 with a minimum grade of C.

Geography (GEOG)

Courses

GEOG A101 Local Places/Global Regions: An Introduction to Geography **3 Credits**

Introduction to cultural, political, and environmental diversity in an international context. Focus on key global issues, current events, and geographic approaches to understanding world problems.

Crosslisted With: INTL A101.

Attributes: UAA Social Sciences GER.

GEOG A111 Earth Systems: Elements of Physical Geography **3 Credits**

Survey of the processes that form the physical environment and the resulting physical patterns. Study of landforms, climate, soils, water resources, vegetation and their world and regional patterns.

Crosslisted With: ENVI A111

Attributes: UAA Natural Sciences GER.

GEOG A375 Environmental Applications of Geographic Information Systems (GIS) **3 Credits**

Concepts in Geographic Information Systems (GIS), with specific focus on environmental applications. Investigation into the need and popularity of using GIS to address complex environmental issues. Integration of both biophysical and socioeconomic spatial data as it relates to environmental issues. Spatial analysis, cartographic design and map compilation principles are placed in the context of environmental studies.

Registration Restrictions: Completion of Tier 1 (basic college-level skills) courses and junior or senior standing.

Prerequisites: ENVI A211L with a minimum grade of C.

GEOG A390A Topics in Global Geography **3 Credits**

Seminar focusing on a thematic approach to human geography in a global context. Draws on the interdisciplinary nature of geography to provide students with a broad understanding of critical global issues.

Special Note: May be repeated twice with change of subtitle.

Registration Restrictions: Completion of Tier 1 (basic college-level skills) courses and junior standing.

Prerequisites: GEOG A101 or INTL A101.

Attributes: UAA Integrative Capstone GER.

GEOG A390B Topics in Regional Geography **3 Credits**

Geography of a specific region of the world, integrating information from a variety of disciplines. Analysis of key issues that present challenges to the region from a geographic perspective.

Special Note: May be repeated twice with change of subtitle.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior or senior standing.

Prerequisites: GEOG A101 with a minimum grade of C or INTL A101 with a minimum grade of C.

Attributes: UAA Integrative Capstone GER.

GEOG A490 Field Studies in Geography **1-3 Credits**

Geographic concepts and processes explored in the field. Introduction to geographic fieldwork techniques and methodology. Students will conduct fieldwork in selected areas of geographic inquiry. Topics range from regional studies to topical studies.

Special Note: May be repeated twice with change of subtitle.

Registration Restrictions: Instructor permission

Geology (GEOL)

Courses

GEOL A111 Physical Geology **3 Credits**

Introduction to physical geology, study of earth and its materials. Processes that operate on and within earth. Formation of common rocks and minerals, and basics of mineral and rock identification and classification.

Registration Restrictions: MATH A055 or higher

Attributes: UAA Natural Sciences GER.

GEOL A111L Physical Geology Laboratory **1 Credit**

Laboratory skills in physical geology. The identification and classification of minerals and rocks. The use and interpretation of maps and remote sensing techniques, and application of lab skills to interpret evidence of geologic processes. Includes a field trip led by the instructor.

Prerequisites: GEOL A111 with a minimum grade of C or concurrent enrollment.

Attributes: UAA Natural Sci Lab Only GER.

GEOL A115 Environmental Geology **3 Credits**

An introduction to the study of applied environmental geology with a focus on geologic processes and linkages to how humans interact with the geologic environment. Both internal and external Earth processes and related topics such as earthquakes and volcanic eruptions as well as coastal processes and mineral and energy resources will be included.

Registration Restrictions: MATH A055 or higher

Attributes: UAA Natural Sciences GER.

GEOL A115L Environmental Geology Laboratory **1 Credit**

Investigation of problems in environmental geology related to volcanic and earthquake hazards, surface and groundwater pollution, landslides, coastal processes, and waste disposal with emphasis on the local areas in Alaska. Several local field trips are included.

Registration Restrictions: MATH A055 or higher

Prerequisites: GEOL A115 or concurrent enrollment.

Attributes: UAA Natural Sci Lab Only GER.

GEOL A121 Physical Geology for Science and Engineering Majors **4 Credits**

Development of applied geology skills through the study of Earth, its materials, and processes operating on and within the planet. Laboratory training in geologic maps and identification and interpretation of minerals and rocks.

Registration Restrictions: MATH A055 or higher. Declared major in science or engineering and instructor approval.

GEOL A178 Fundamentals of Oceanography **3 Credits**

Principles of oceanography, with emphasis on the ocean's biological, physical, chemical, and geological processes, and how ocean processes affect the atmosphere.

Registration Restrictions: Placement into MATH A105 or higher.

Crosslisted With: BIOL A178

Attributes: UAA Natural Sciences GER.

GEOL A179 Fundamentals of Oceanography Laboratory **1 Credit**
Laboratory exercises designed to illustrate principles and concepts developed in BIOL A178/GEOL A178.

Registration Restrictions: Placement into MATH A105 or higher.

Crosslisted With: BIOL A179

Attributes: UAA Natural Sci Lab Only GER.

GEOL A190 Introductory Topics in Geology **1-3 Credits**

Introductory study of a selected topic in geology.

Special Note: May be repeated with change of topic.

GEOL A221 Historical Geology **4 Credits**

Introduces the history of the earth through geologic time, emphasizing North America. Includes major events in plate tectonics, evolution of life forms and interpretation of the rock record. Lab includes invertebrate fossil identification, geologic map interpretation, stratigraphic principles and field trip.

Prerequisites: (GEOL A111 with a minimum grade of C and GEOL A111L with a minimum grade of C) or (GEOL A115 with a minimum grade of C and GEOL A115L with a minimum grade of C) or (GEOL A121 with a minimum grade of C) and (MATH A105 with a minimum grade of C or ALEKS Overall Test 1 with a score of 055 or ALEKS Overall Test 2 with a score of 055 or ALEKS Overall Test 3 with a score of 055 or ALEKS Overall Test 4 with a score of 055 or ALEKS Overall Test 5 with a score of 055).

Attributes: UAA Natural Science w/ Lab GER.

GEOL A225 Earth Surface Processes **3 Credits**

Introduces the identification and mapping of landforms, and quantitative study of processes that shape the earth's surface. Combines theory, field observations, basic data analysis, and modeling to investigate geomorphic systems that affect humanity.

Prerequisites: GEOL A221 with a minimum grade of C.

GEOL A310 Professional Practices in Geology **3 Credits**

Introduces workplace ethics, responsibilities, and expectations of geologists in a professional role. Practices research methods, writing, and presentation techniques in the geosciences. Includes research design, proposal writing, resume and job applications, scientific writing, critical review, and oral presentation techniques.

Registration Restrictions: BS Geological Science majors only

Prerequisites: (GEOL A111 with a minimum grade of C and GEOL A111L with a minimum grade of C) or (GEOL A115 with a minimum grade of C and GEOL A115L with a minimum grade of C) or (GEOL A121 with a minimum grade of C) and (WRTG A211 or WRTG A212 or WRTG A213 or WRTG A214 or WRTG A21W).

GEOL A315 Geological Data Visualization and Analysis **3 Credits**

Introduces different types of geological data and basic computational methods for visualization and analysis. Provides skills to understand the nature of geoscience datasets and perform quantitative interpretation to fully understand many subject areas in geosciences.

Prerequisites: GEOL A225 with a minimum grade of C.

GEOL A320 Volcanology **3 Credits**

The description and classification of volcanoes, volcanic eruptions, and volcanic deposits. Includes the history of volcanic studies, myths, and legends. Emphasis on the dynamics of volcanic eruptions, pyroclastic rocks, lava flows, and volcanic hazard assessment.

Prerequisites: GEOL A221.

GEOL A321 Mineralogy **4 Credits**

Covers crystallography, including external form and internal order. Includes crystal chemistry, atomic structure, crystal structure, and compositional variation, nature and origin of physical properties of minerals. Mineral association, occurrence and paragenesis. Introduces x-ray crystallography and optical mineralogy. Laboratory includes determinative crystallography, optical mineralogy and systematic determinative mineralogy.

Prerequisites: ((GEOL A111 with a minimum grade of C and GEOL A111L with a minimum grade of C) or (GEOL A115 with a minimum grade of C and GEOL A115L with a minimum grade of C)) and (CHEM A105 with a minimum grade of C and CHEM A105L with a minimum grade of C) and (PHYS A123 with a minimum grade of C and PHYS A123L with a minimum grade of C) and (MATH A105 with a minimum grade of C or ALEKS Overall Test 1 with a score of 055 or ALEKS Overall Test 2 with a score of 055 or ALEKS Overall Test 3 with a score of 055 or ALEKS Overall Test 4 with a score of 055 or ALEKS Overall Test 5 with a score of 055).

GEOL A322 Igneous and Metamorphic Petrology **4 Credits**

Covers identification and classification of igneous and metamorphic rocks, interpretation of textures, structures, and mineralogy of rocks. Includes the study of chemical and physical principles controlling the formation of rocks, importance of various rock types in economic and industrial arenas. Extensive study of hand specimens with emphasis on composition, texture and structure.

Prerequisites: GEOL A310 with a minimum grade of C and GEOL A321 with a minimum grade of C.

GEOL A325 Geology of Ore Deposits **3 Credits**

Genesis, tectonic setting and properties of selected metallic ore deposits. Significant hand sample identification and paragenetic associations of ore minerals and certain ore deposits including mafic layered intrusions, hydrothermal deposits, massive sulfides, and porphyry deposits. Emphasis on origin and transport of ore bearing fluids and deposition of ore minerals.

Prerequisites: GEOL A322.

GEOL A331 Sedimentology and Stratigraphy **3 Credits**

Survey of sediments including origins, classification, transportation, composition, structures, and diagenesis. Stratigraphic principles including lithostratigraphy, biostratigraphy, magnetostratigraphy, chronostratigraphy, and seismic stratigraphy. Lab includes grain size analysis, sedimentary structures, correlation, and field practicum.

Prerequisites: GEOL A225 with a minimum grade of C and GEOL A310 with a minimum grade of C.

GEOL A332 Sedimentary Petrology Laboratory **1 Credit**

Introduction to clastic petrology, carbonate petrology and sedimentary petrography. Emphasis on hand sample identification and petrographic techniques.

Prerequisites: GEOL A321 with a minimum grade of C and GEOL A331 with a minimum grade of C or concurrent enrollment.

GEOL A335 Structural Geology 4 Credits

Covers fundamental concepts of rock deformation: description and formation of geologic structures; brittle and ductile deformation; characteristic structures in different tectonic environments; concepts of stress, strain and brittle failure mechanics; and salt tectonics. Laboratory includes analysis of structure contours, geologic maps and cross sections, stereonet, kinematic analysis, and the Mohr circle technique.

Prerequisites: GEOL A331 with a minimum grade of C and PHYS A123 with a minimum grade of C and PHYS A123L with a minimum grade of C and MATH A155 with a minimum grade of C.

GEOL A345 Hydrogeology 3 Credits

Comprehensively covers the fundamentals of hydrogeology, including physical and hydraulic properties of subsurface aquifers, Darcy's Law and the groundwater flow equation, hydraulic head, storage and effective stress, regional groundwater flow, aquifer hydraulics, and water well design and development.

Special Note: Laboratory time will be used to enhance data analysis, mathematical and problem-solving skill sets.

Prerequisites: GEOL A315 with a minimum grade of C and GEOL A331 with a minimum grade of C and MATH A251 with a minimum grade of C.

GEOL A350 Geomorphology 4 Credits

Study of landforms and processes that affect their development, including tectonics, geologic structures, bedrock lithology, streams, glaciers, groundwater, and oceans. Laboratory focuses on formation and genesis of landforms based on evidence from topographic maps and aerial photography.

Prerequisites: GEOL A221.

GEOL A361 Earth Resources and Society 3 Credits

A global-scale investigation of the state of water, energy and mineral resources and the linkages to society and the environment. Review of historical sources, uses and demands on water, energy and mineral resources and the connection to human population growth over time. Investigation of the scientific and social motivations for shifting how humans use water, energy and mineral resources.

Registration Restrictions: Junior or higher standing and completion of Tier 1 GER courses.

Prerequisites: (GEOL A111 with a minimum grade of C or GEOL A115 with a minimum grade of C or GEOL A121 with a minimum grade of C or GEOL A221 with a minimum grade of C) and (ENVI A211 with a minimum grade of C or ENVI A212 with a minimum grade of C).

Attributes: UAA Integrative Capstone GER.

GEOL A380 Anchorage Field Studies 3 Credits

Field experience focusing on the Anchorage area. Field trips to Anchorage, Eagle River, Turnagain, and Matanuska Valley to investigate the geologic history, glacial history, plate tectonics, and environmental concerns. Local rocks, formations, fossils, glacial landforms and structures will be examined. Five full day field trips.

Prerequisites: GEOL A221.

GEOL A381 Kenai Peninsula Field Studies 3 Credits

Nine-day field excursion from Anchorage to Portage, Kenai, Nikiski, Homer and Seward, Alaska, to explore gold mining; oil and gas exploration and production; Tertiary coal, fossils and paleoenvironments; coastal geomorphology; glacial history; and plate tectonics of the Kenai Peninsula. Includes a full-day boat excursion in Kenai Fjords National Park.

Special Note: Students are required to provide their own food, transportation, and field and camping gear.

Prerequisites: GEOL A221 with a minimum grade of C.

GEOL A382 Geologic Field Studies 3 Credits

Field excursion within the United States or another country to study the local and regional geology. Field notes, rock and outcrop descriptions, mapping and field exercises required.

Special Note: May be repeated for a maximum of 9 credits with change of subtitle. Students may be required to provide their own transportation depending on location of field trip.

Prerequisites: GEOL A221 with a minimum grade of C.

GEOL A426 Mineral Resources 3 Credits

Mineral resource genesis, classification, exploration, development and associated environmental factors, with a focus on metallic and non-metallic minerals. Specific analysis of mineral resource availability, exploration techniques, viability of extraction and processing, and assessment of environmental implications of extraction. Includes one or more case studies of existing exploration and/or mining sites.

Special Note: Not available for credit to students who have completed GEOL A626.

May Be Stacked With: GEOL A626

Prerequisites: GEOL A322 with a minimum grade of C and GEOL A461 with a minimum grade of C.

GEOL A430 Sedimentology 3 Credits

Survey of sediments, including origins, classification, transportation, composition, structures and diagenesis. Lab analysis of grain size, sedimentary structures, concretions and hand samples. Includes field labs.

Special Note: Students are required to provide their own transportation to field locales.

Registration Restrictions: Junior standing or higher

Prerequisites: GEOL A310 with a minimum grade of C and (STAT A253 with a minimum grade of C or STAT A307 with a minimum grade of C).

GEOL A431 Stratigraphy 3 Credits

Introduction to concepts and applications in stratigraphic analyses.

Includes concepts of lithostratigraphy, magnetostratigraphy, biostratigraphy, chronostratigraphy, seismic stratigraphy and sequence stratigraphy. Discussion of the completeness of the stratigraphic record and the North American Stratigraphic Code.

Registration Restrictions: Junior standing or higher

Prerequisites: GEOL A430 with a minimum grade of C.

GEOL A435 Stratigraphy and Sedimentary Petrology 3 Credits

Introduction to stratigraphy of clastic and carbonate rocks including common environments of deposition, sedimentary rock classification, sedimentary rock fabric identification and interpretation, petrographic inspection, and correlation techniques.

Prerequisites: GEOL A321 with a minimum grade of C or concurrent enrollment and GEOL A430 with a minimum grade of C or concurrent enrollment.

GEOL A436 Petroleum Geology 3 Credits

Formation of hydrocarbons, their migration and accumulation in the context of the petroleum system, and their exploration and extraction. Includes an introduction to subsurface datasets used in the petroleum industry and how to integrate them. Conventional and unconventional petroleum systems are discussed in the class using examples from Alaska and around the world.

Special Note: Not available for credit to students who have completed GEOL A636.

May Be Stacked With: GEOL A636

Prerequisites: GEOL A221 with a minimum grade of C.

GEOL A437 Depositional Systems and Dynamic Stratigraphy 3 Credits

Advanced skills in sedimentary geology that can be applied in oil/gas, hydrology, and mining. Includes greater detail in depositional environments, characteristics of resultant sedimentary deposits, and sequence stratigraphy using various geologic datasets. Emphasis on hands-on application of course concepts in outcrop, core and well-log data.

Special Note: Not available for credit to students who have completed GEOL A637.

May Be Stacked With: GEOL A637

Prerequisites: GEOL A221 with a minimum grade of C.

GEOL A438 Advanced Sedimentary Petrology 3 Credits

Advanced concepts in sedimentary petrography and petrology, including a survey of diagenesis. Topics include advanced rock classification, grain identification in thin section, cement identification, sedimentary fabric, paragenetic sequence and provenance analysis, and porosity estimation in carbonate and clastic sedimentary rocks. Emphasis on hands-on description, interpretation and applications.

Special Note: Not available for credit to students who have completed GEOL A638.

May Be Stacked With: GEOL A638

Prerequisites: GEOL A321 with a minimum grade of C and GEOL A431 with a minimum grade of C.

GEOL A445 Geothermal Energy 3 Credits

Comprehensive coverage of geothermal systems and relevant processes including conductive and convective heat flow, subsurface fluid flow, geothermal exploration, resource assessment, structural settings favorable for geothermal reservoirs, microseismicity, well scaling and corrosion, power generation, and enhanced geothermal systems.

Special Note: Not available for credit to students who have completed GEOL A645.

May Be Stacked With: GEOL A645

Prerequisites: CHEM A105 with a minimum grade of C and GEOL A221 with a minimum grade of C and MATH A251 with a minimum grade of C and PHYS A124 with a minimum grade of C.

GEOL A448 Structural Geology and Geomechanics 3 Credits

Examines the classification, origin, and evolution of all types of rock fractures with application to structural analysis, oil and gas reservoirs, resource recovery, engineering geology, hydrogeology, and hazards analysis. Applies continuum and rock mechanics principles to brittle deformation, including rock strength and failure criteria, stress states in the lithosphere, stress tensors, and linear elastic fracture mechanics theory.

Special Note: Students may need to provide their own transportation to a field trip location. Not available for credit to students who have completed GEOL A648.

May Be Stacked With: GEOL A648

Prerequisites: GEOL A335 with a minimum grade of C.

GEOL A452 Sedimentology and Stratigraphy 4 Credits

Survey of sediments including origins, classification, transportation, composition, structures, and diagenesis. Stratigraphic principles including lithostratigraphy, biostratigraphy, magnetostratigraphy, chronostratigraphy, and seismic stratigraphy. Lab includes grain size analysis, sedimentary structures, correlation, and field practicum.

Prerequisites: GEOL A221 and (STAT A252 or STAT A253 or STAT A307).

GEOL A454 Glacial and Quaternary Geology 3 Credits

Examines glacial processes of erosion and deposition, and the modern and ancient landforms produced by ice. Topics include Quaternary history of glaciers, climate fluctuation, changes in terrestrial and marine environments, and evidence and techniques used to reconstruct past environments. Weekend field trip required.

Special Note: Not available for credit to students who have completed GEOL A654. Students are required to provide their own transportation to field locales.

May Be Stacked With: GEOL A654

Prerequisites: GEOL A221 with a minimum grade of C.

GEOL A455 Permafrost 3 Credits

Examines permafrost geomorphic processes, environments and landforms. Topics include properties of ground ice and patterned ground, permafrost landscape dynamics, engineering and environmental problems, and impacts of climate change on permafrost systems. One weekend field trip required.

Special Note: Students are required to provide their own transportation to field locales. Not available for credit to students who have completed GEOL A655.

Registration Restrictions: Instructor approval

May Be Stacked With: GEOL A655

Prerequisites: GEOL A221 with a minimum grade of C.

GEOL A456 Geoarchaeology 3 Credits

Integration of geology and archaeology. Rock identification of lithic sources, sediment analysis of site deposits, paleolandscape reconstruction, geochronology and environmental change. Response to changes in resources and climate by past societies and application to contemporary problems and issues.

Special Note: Students are required to provide their own transportation to field locales. Not available for credit to students who have completed GEOL A656.

Registration Restrictions: Junior standing or higher

May Be Stacked With: GEOL A656

Prerequisites: ANTH A211 with a minimum grade of C and GEOL A221 with a minimum grade of C.

Attributes: UAA Integrative Capstone GER.

GEOL A458 Geology of Alaska 3 Credits

Alaskan geology including physiographic provinces, earthquakes, volcanoes, plate tectonics, resources, glaciers, permafrost, rivers, coasts and wind. Emphasis on processes, landforms and differences between specific areas in Alaska.

Special Note: Students are required to provide their own transportation for optional field trips. Not available for credit to students who have completed GEOL A658.

May Be Stacked With: GEOL A658

Prerequisites: GEOL A221 with a minimum grade of C.

GEOL A461 Geochemistry 3 Credits

Introduction to principles and applications of inorganic geochemistry. Emphasis on crystal structures and substitution in crystals, equilibrium geochemistry, dissociation of acids and bases, and mineral stability. Applying the laws of thermodynamics, Eh-pH diagrams, and oxidation-reduction reactions to geologic problems. Principles of radioactivity and geochronometers for age determination. A review of applications of stable isotopes to geologic problems.

Special Note: Not available for credit to students who have completed GEOL A661.

Registration Restrictions: BS Geological Science majors

May Be Stacked With: GEOL A661

Prerequisites: CHEM A106 with a minimum grade of C and GEOL A322 with a minimum grade of C.

GEOL A463 Environmental Geochemistry 3 Credits

Principles and applications of environmental geochemistry on a global scale. Geochemical cycles and chemical mass balance of elements. Chemical weathering and the composition of natural waters. Processes affecting the distribution of trace elements in geologic environments. Stable isotope fractionation and applications to modeling environmental systems. Review of specific cases of modern environmental geochemistry problems.

Special Note: Not available for credit to students who have completed GEOL A663.

May Be Stacked With: GEOL A663

Prerequisites: GEOL A461 with a minimum grade of C.

GEOL A465 Isotope Geochemistry 3 Credits

Examine principles and applications of radiogenic and stable isotopes with emphasis on application in the hydrologic, earth, and ecosystem sciences. Focuses on both traditional and environmental aspects of isotope geochemistry and biogeochemistry and some special applications to other fields of study such as anthropology, archaeology, and forensics. A class research project will include field sampling, sample analysis, and interpretation.

May Be Stacked With: GEOL A665

Prerequisites: CHEM A106 and GEOL A461.

GEOL A468 Geomicrobiology 3 Credits

Examines the mutual interactions between geology and microbiology. Emphasizes microbial processes that affect local and global environments including biogeochemical cycles, co-evolution, microbe-mineral interactions and life in extreme environments.

Crosslisted With: MBIO A468

Prerequisites: MBIO A340 with a minimum grade of C or GEOL A360 with a minimum grade of C.

Attributes: UAA Integrative Capstone GER.

GEOL A476 Applied Geophysics 3 Credits

Overview of geophysical techniques used for subsurface visualization, mapping and interpretation, with applications to natural resource exploration, geotechnical investigations and environmental studies. Techniques include gravity, magnetic, electric, seismic and well logging. Applications of mathematics and physics-based principles to image shallow and deep subsurface at local and regional scales.

Special Note: Not available for credit to students who have completed GEOL A676.

Registration Restrictions: Instructor permission required for non-majors. Background in calculus-based mathematics or physics is required for geology non-majors.

May Be Stacked With: GEOL A676

Prerequisites: GEOL A335 with a minimum grade of C and MATH A251 with a minimum grade of C and PHYS A124 with a minimum grade of C and PHYS A124L with a minimum grade of C.

GEOL A477 Integrated Subsurface Mapping and Analysis 3 Credits

Integration of different geologic and geophysical data for subsurface interpretation and energy exploration. Application of state-of-the-art technologies on real datasets for subsurface mapping, quantitative basin analysis, technical assessment of hydrocarbon prospects, and uncertainty analysis in active and team-based learning environments.

Special Note: Optionally, a group of five students may be selected to participate in the nationally competitive Imperial Barrel Award (IBA) competition organized by the American Association of Petroleum Geologists. GEOL A476 or GEOL A676 is recommended prior to enrollment in this course, but not required. Not available for credit to students who have completed GEOL A677.

May Be Stacked With: GEOL A677

Prerequisites: GEOL A315 with a minimum grade of C and GEOL A335 with a minimum grade of C.

GEOL A480 Geologic Field Methods 3 Credits

Introduces principles and applications of basic geologic field methods including construction of bedrock geologic maps and cross-sections. Emphasizes field note taking, geologic mapping, stratigraphic section measurement and construction. Requires students to complete several field projects including written summary reports.

Special Note: Students may be required to provide their own transportation to and from field sites.

Prerequisites: GEOL A310 with a minimum grade of C and GEOL A322 with a minimum grade of C and GEOL A335 with a minimum grade of C and GEOL A350 with a minimum grade of C.

GEOL A481 Alaskan Field Investigations 3 Credits

Field excursion in southern and central Alaska. Mapping of sedimentary, metamorphic, and volcanic rocks. Mapping of Quaternary deposits from aerial photography. Construction of stratigraphic sections. Use of appropriate field techniques and tools. Exploration of Alaskan coal and gold mining, permafrost environments, Pleistocene glacial environments, tectonics and volcanic hazards.

Special Note: Course fees cover lodging and camping fees. Students required to provide own food, transportation, field and camping gear.

Prerequisites: GEOL A350 and GEOL A480.

GEOL A482 Geologic Field Investigations 3 Credits

Field excursion within the United States or another country to conduct field exercises on bedrock and/or surficial mapping, generate cross-sections from maps, measure and draw stratigraphic sections, and learn regional geology and tectonic settings.

Special Note: Course counts as credit toward the major even if field camp taken elsewhere. Students may be required to provide their own transportation depending on location of field trip.

Prerequisites: GEOL A480 with a minimum grade of C.

GEOL A490 Advanced Topics in Geology 1-4 Credits

Detailed study of a selected topic in geology.

Special Note: May be repeated for credit with change of subtitle. Not available for credit to students who have completed GEOL A690 with same subtitle.

May Be Stacked With: GEOL A690

Prerequisites: GEOL A221 with a minimum grade of C.

GEOL A492 Geology Seminar 1 Credit

Lecture series with invited professional geologists, discussion of relevant professional papers and research. Topical nature of material.

Special Note: May be repeated under different subtitles for a maximum of 3 credits.

Prerequisites: GEOL A221.

GEOL A495 Geology Internship 1-3 Credits

Work experience in an approved position with supervision and training in various agencies and businesses. Exposes student to work environment beyond the campus setting, to acquire essential practical skills and enhance self-confidence and career direction.

Special Note: May be repeated, but only 3 credits count toward major requirements.

Registration Restrictions: Junior standing

GEOL A498 Student Research 1-3 Credits

Student research conducted on specific subjects in geology. Research topic to be approved and directed by a faculty member in the Department of Geological Sciences.

Special Note: May be repeated for a maximum of 6 credits.

Registration Restrictions: Faculty permission.

GEOL A499 Senior Thesis 3 Credits

Planning, preparation and completion of senior thesis for the BS in Geological Sciences.

Special Note: May be repeated for a maximum of 6 credits.

Registration Restrictions: Senior standing and faculty permission.

GEOL A623 Advanced Igneous and Metamorphic Petrology 3 Credits

Igneous and metamorphic processes and the evolution of the lithosphere. Application of field, petrographic and chemical data to models of petrogenesis and metamorphism.

Registration Restrictions: Graduate standing or instructor permission.

GEOL A626 Advanced Mineral Resources 3 Credits

Mineral resource genesis, classification, exploration, development and associated environmental factors, with a focus on metallic and non-metallic minerals. Specific analysis of mineral resource availability, exploration techniques, viability of extraction and processing, and assessment of environmental implications of extraction. Includes one or more case studies of existing exploration and/or mining sites.

Special Note: Not available for credit to students who have completed GEOL A426.

Registration Restrictions: Graduate standing or instructor permission.

May Be Stacked With: GEOL A426

GEOL A636 Advanced Petroleum Geology 3 Credits

Advanced study of the formation of hydrocarbons, their migration and accumulation in the context of the petroleum system, and their exploration and extraction. Emphasizes interpretation of subsurface data used in the petroleum industry and their integration. Conventional and unconventional petroleum systems from Alaska and around the world included.

Registration Restrictions: Graduate standing

Special Note: Not available for credit to students who have completed GEOL A436.

May Be Stacked With: GEOL A436

GEOL A637 Advanced Depositional Systems and Dynamic Stratigraphy 3 Credits

Advanced skills in sedimentary geology that can be applied in oil/gas, hydrology, and mining. Includes greater detail in depositional environments, characteristics of resultant sedimentary deposits, and sequence stratigraphy using various geologic datasets. Emphasis on hands-on application of course concepts in outcrop, core and well-log data.

Special Note: Not available for credit to students who have completed GEOL A437.

Registration Restrictions: Graduate standing

May Be Stacked With: GEOL A437

GEOL A638 Applied Sedimentary Petrology and Diagenesis 3 Credits
Advanced concepts in sedimentary petrography and petrology, including diagenesis. Topics include advanced rock classification, grain identification in thin section, cement identification, sedimentary fabric, paragenetic sequence and provenance analysis, and porosity estimation in carbonate and clastic sedimentary rocks. Emphasis on hands-on description, interpretation and applications.

Special Note: Not available for credit to students who have completed GEOL A438.

Registration Restrictions: Graduate standing

May Be Stacked With: GEOL A438

GEOL A640 Advanced Hydrogeology 4 Credits

Comprehensive coverage of the fundamentals of hydrogeology including physical and hydraulic properties of subsurface aquifers, Darcy's Law and the groundwater flow equation, hydraulic head, storage and effective stress, regional groundwater flow, aquifer hydraulics, and water well design and development. Laboratory time will be used to enhance data analysis, mathematical and problem-solving skill sets.

Registration Restrictions: Graduate standing

GEOL A645 Advanced Geothermal Energy 3 Credits

Comprehensive coverage of geothermal systems and relevant processes including conductive and convective heat flow, subsurface fluid flow, geothermal exploration, resource assessment, structural settings favorable for geothermal reservoirs, microseismicity, well scaling and corrosion, power generation and enhanced geothermal systems.

Registration Restrictions: Graduate standing

Special Note: Not available for credit to students who have completed GEOL A445.

May Be Stacked With: GEOL A445

GEOL A648 Advanced Structural Geology and Geomechanics 3 Credits

Classification, origin and evolution of all types of rock fractures with application to structural analysis, oil and gas reservoirs, resource recovery, engineering geology, hydrogeology and hazards analysis. Application of continuum and rock mechanics principles to brittle deformation, including rock strength and failure criteria, stress states in the lithosphere, stress tensors and linear elastic fracture mechanics theory.

Special Note: Students may need to provide their own transportation to a field trip location. Not available for credit to students who have completed GEOL A448.

Registration Restrictions: Graduate standing or instructor permission.

May Be Stacked With: GEOL A448

GEOL A654 Glacial and Quaternary Geology 3 Credits

Examines glacial processes of erosion and deposition, and the modern and ancient landforms produced by ice. Topics include Quaternary history of glaciers, climate fluctuation, changes in terrestrial and marine environments, and evidence and techniques used to reconstruct past environments. Independent research project and weekend field trip required.

Special Note: Students are required to have background in physical and historical geology and to provide their own transportation to field locales. Not available for credit to students who have completed GEOL A454.

Registration Restrictions: Graduate standing or instructor approval.

May Be Stacked With: GEOL A454

GEOL A655 Permafrost 3 Credits

Examines permafrost geomorphic processes, environments and landforms. Topics include properties of ground ice and patterned ground, permafrost landscape dynamics, engineering and environmental problems, and impacts of climate change on permafrost systems. One weekend field trip and independent research required.

Special Note: Students are required to have background in physical and historical geology and provide their own transportation to field locales. Not available for credit to students who have completed GEOL A455.

Registration Restrictions: Graduate standing or instructor approval

May Be Stacked With: GEOL A455

GEOL A656 Geoarchaeology 3 Credits

Integration of geology and archaeology. Rock identification of lithic sources, sediment analysis of site deposits, paleolandscape reconstruction, geochronology and environmental change. Response to changes in resources and climate by past societies and application to contemporary problems and issues. Independent research project required.

Special Note: Students are required to have background in physical and historical geology and provide their own transportation to field locales. Not available for credit to students who have completed GEOL A456.

Registration Restrictions: Graduate standing or instructor permission

May Be Stacked With: GEOL A456

GEOL A658 Advanced Geology of Alaska 3 Credits

Alaskan geology including physiographic provinces, earthquakes, volcanoes, plate tectonics, resources, glaciers, permafrost, rivers, coasts and wind. Emphasis on processes, landforms and differences between specific areas in Alaska. Independent research and professional presentation required.

Registration Restrictions: Graduate standing

Special Note: Students are required to provide their own transportation for optional field trips. Not available for credit to students who have completed GEOL A458.

May Be Stacked With: GEOL A458

GEOL A661 Advanced Geochemistry 3 Credits

Introduction to principles and applications of inorganic geochemistry. Emphasis on crystal structures and substitution in crystals, equilibrium geochemistry, dissociation of acids and bases, and mineral stability. Applying the laws of thermodynamics, Eh-pH diagrams, and oxidation-reduction reactions to geologic problems. Principles of radioactivity and geochronometers for age determination. A review of applications of stable isotopes to geologic problems.

Special Note: Not available for credit to students who have completed GEOL A461.

Registration Restrictions: Graduate standing or instructor permission

May Be Stacked With: GEOL A461

GEOL A663 Environmental Geochemistry 3 Credits

Principles and applications of environmental geochemistry on a global scale. Geochemical cycles and chemical mass balance of elements. Chemical weathering and the composition of natural waters. Processes affecting the distribution of trace elements in geologic environments. Stable isotope fractionation and applications to modeling environmental systems. Review of specific cases of modern environmental geochemistry problems. Independent research project required.

Special Note: Students are required to have background in physical and historical geology. Not available for credit to students who have completed GEOL A463.

Registration Restrictions: Graduate standing or instructor approval

May Be Stacked With: GEOL A463

GEOL A665 Isotope Geochemistry 3 Credits

Principles and applications of radiogenic and stable isotopes with emphasis on applications in the hydrologic, earth and ecosystem sciences. Focus on both traditional and environmental aspects of isotope geochemistry and biogeochemistry and some special applications to other fields of study such as anthropology, archaeology and forensics. A class research project will include field sampling, sample analysis and interpretation. Independent research project required.

Registration Restrictions: Graduate standing

May Be Stacked With: GEOL A465

Prerequisites: CHEM A106 and GEOL A461.

GEOL A676 Applied Geophysics 3 Credits

Overview of geophysical techniques used for subsurface visualization, mapping and interpretation, with applications to natural resource exploration, geotechnical investigations and environmental studies. Techniques include gravity, magnetic, electric, seismic and well logging. Applications of mathematics and physics-based principles to image shallow and deep subsurface at local and regional scales.

Special Note: Not available for credit to students who have completed GEOL A476.

Registration Restrictions: Graduate standing or instructor permission.

May Be Stacked With: GEOL A476

GEOL A677 Integrated Subsurface Mapping and Analysis 3 Credits

Integration of different geologic and geophysical data for subsurface interpretation and energy exploration. Application of state-of-the-art technologies on real datasets for subsurface mapping, quantitative basin analysis, technical assessment of hydrocarbon prospects, and uncertainty analysis in active and team-based learning environments.

Special Note: A group of five students will be selected to participate at the Imperial Barrel Award (IBA) competition organized by the American Association of Petroleum Geologists (AAPG). Not available for credit to students who have completed GEOL A477.

May Be Stacked With: GEOL A477

GEOL A678 Petroleum Geophysics and Petrophysics 3 Credits

Principles and methods in seismic analysis and petrophysics, with emphasis on hydrocarbon exploration from conventional and unconventional reservoirs and CO₂ storage. Extensive practical training on 2D/3D seismic data analysis, and integration with petrophysical logs to interpret structural and stratigraphic features, analyze subsurface lithology, pore fluid, and map reservoir geobodies.

Registration Restrictions: Graduate standing or instructor permission. Basic understanding of structural geology and/or stratigraphy required.

GEOL A688 Professional Project 3 Credits

Individualized professional project in an area of geological sciences as related to the profession. Project topic must be approved by the graduate committee.

Registration Restrictions: Graduate standing or instructor permission.

GEOL A689 Geology Graduate Professional Practices 3 Credits

Professional development of graduate students in preparation for careers in the geosciences.

Registration Restrictions: Graduate students must take this course by the end of the second semester of their degree program.

GEOL A690 Graduate Topics in Geology 1-4 Credits

Intensive study of narrowly defined topic in geology with emphasis on current problems. Independent research project required.

Special Note: Students are required to have background in physical and historical geology. May be repeated for a maximum of 9 credits with change of subtitle. Not available for credit to students who have completed GEOL A490 with the same subtitle.

Registration Restrictions: Graduate standing or instructor approval.

May Be Stacked With: GEOL A490

GEOL A698 Directed Research 1-6 Credits

Thesis-specific research for interdisciplinary M.S. with emphasis in Geological Sciences. Research topic must be approved by thesis advisor and committee.

Special Note: May be repeated for a maximum of 6 credits.

Registration Restrictions: Graduate standing and permission of thesis advisor.

GEOL A699 Graduate Thesis 1-6 Credits

Planning, preparation and completion of thesis for M.S. degree at graduate level.

Registration Restrictions: Graduate standing

Special Note: Permission of graduate advisor required. May be repeated for a maximum of 12 credits.

Geomatics (GEO)

Courses

GEO A146 Geomatics Computations I 3 Credits

Introduces geomatic principles and methods of computation related to Cartesian coordinate systems, coordinate geometry, subdivision and area. Examines computations of circular, spiral and vertical curves. Presents methods of adjusting geomatics data and using a current industry-standard handheld calculator.

Prerequisites: GEO A156 with a minimum grade of C or concurrent enrollment and (MATH A151 with a minimum grade of C or concurrent enrollment or MATH A152 with a minimum grade of C or concurrent enrollment or MATH A155 with a minimum grade of C or concurrent enrollment or MATH A221 with a minimum grade of C or concurrent enrollment or MATH A251 with a minimum grade of C or concurrent enrollment).

GEO A155 Introduction to Surveying 3 Credits

Orientation and introduction to field surveying theory and techniques for non-geomatics majors. Subject areas include distance measurement, leveling, angular measurements, basic traversing, measurement adjustments, fundamentals of mapping, and use and care of surveying instruments.

Prerequisites: MATH A152 with a minimum grade of C or concurrent enrollment or MATH A155 with a minimum grade of C or concurrent enrollment or MATH A221 with a minimum grade of C or concurrent enrollment or MATH A251 with a minimum grade of C or concurrent enrollment.

GEO A156 Fundamentals of Surveying 3 Credits

Fundamentals of geomatics, survey measurement theory and techniques for geomatics majors. Subject areas include taping, tape corrections, leveling, angle measurements, traversing, traverse adjustments, contouring, fundamentals of mapping, and proper use and care of surveying instruments.

Prerequisites: MATH A151 with a minimum grade of C or concurrent enrollment or MATH A152 with a minimum grade of C or concurrent enrollment or MATH A155 with a minimum grade of C or concurrent enrollment or MATH A221 with a minimum grade of C or concurrent enrollment or MATH A251 with a minimum grade of C or concurrent enrollment.

GEO A157 Computer-Aided Drafting for Surveyors 3 Credits

Introduction to the knowledge and skills necessary to create maps and plats using computer-aided drafting. Topics of study include basic drafting principles, drawing setup and scale, drawing commands, digital terrain modeling, and mapping standards and accuracies.

Prerequisites: GEO A156 with a minimum grade of C.

GEO A181 Construction Surveying 1 Credit

Basic construction surveying procedures, including staking for roads, buildings and excavations; use of maps, construction plans, datums and co-ordinate systems; machine control systems. The course is predominantly field work.

Prerequisites: MATH A105 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C.

GEO A246 Geomatics Computations II 3 Credits

Covers computational methods and computer programming techniques for geomatics.

Prerequisites: GEO A146 with a minimum grade of C and (MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C).

GEO A256 Engineering Surveying 3 Credits

Covers the theory and application of engineering surveying, including design and implementation of horizontal and vertical control, route surveys, horizontal and vertical curves, control surveys, quantity surveys, and mining surveys. Discusses the application of the theory of errors, error budgets, and error simulation and calibration.

Prerequisites: GEO A266 with a minimum grade of C or concurrent enrollment.

GEO A266 Advanced Surveying 3 Credits

Examines advanced survey measurement techniques using conventional survey instrumentation, total stations and data controllers. Practical application of control surveys, leveling and field to finish mapping is provided through topographic surveying projects. Introduces basics of terrestrial LiDAR surveying.

Prerequisites: GEO A156 with a minimum grade of C and GEO A157 with a minimum grade of C.

GEO A267 Boundary Law I 3 Credits

Presents elements of boundary control and legal principles. Course topics include boundary history, ownership, rights, interests, title, transfer, description of real property, the rectangular system, sequential conveyances, simultaneously created boundaries and water boundary elements.

Prerequisites: WRTG A212 with a minimum grade of C and GEO A156 with a minimum grade of C.

GEO A354 City and Regional Planning 3 Credits

Introduction to fundamentals concepts, including physical planning, transportation, housing, land use, urban development and preservation. Population movement to cities and suburbs; rural depopulation. Regional growth and development. Political and economic development drivers. History, theory and ethics of planning. Virtual environments. GIS and support tools for planning decisions.

Registration Restrictions: Junior or senior standing.

GEO A355 Land Development and Design 3 Credits

Presents concepts governing land development. Examines analysis of soil, topography, geometry, environmental impact, aesthetic and economic principles in land planning. Discusses the permitting process and federal, state and municipality platting regulations. Covers automated subdivision design and platting and ethical considerations when developing land.

Prerequisites: GEO A157 with a minimum grade of C and GEO A267 with a minimum grade of C.

GEO A357 Photogrammetry 3 Credits

Outlines principles of optics, image formation and lens distortions. Introduces aerial and terrestrial cameras, close-range photogrammetry, stereoscopic image acquisition and measurements, 3D model reconstruction, and aerial photogrammetry.

Prerequisites: GEO A246 with a minimum grade of C and GIS A351 with a minimum grade of C.

GEO A359 Geodesy and Map Projections 3 Credits

Introduction to geometrical and physical geodesy. Examines computations on the ellipsoid, elements of datums, map projections and state plane coordinate systems.

Prerequisites: GEO A246 with a minimum grade of C.

GEO A364 Spatial Data Adjustments I 3 Credits

Examines fundamental concepts of statistical error analysis with applications to surveying measurements. Covers fundamental properties of data sets, including measures of central tendency, measures of data variation, sampling distribution theory, statistical confidence intervals and testing, and propagation of variance. Introduces least squares adjustment.

Prerequisites: GEO A246 with a minimum grade of C and STAT A253 with a minimum grade of C.

GEO A366 Spatial Data Adjustments II 3 Credits

Presents the theory and mechanics of least squares adjustment using the traditional surveying observations of distances, angles, azimuths and elevation differences. Covers post-adjustment analysis through the use of various statistical tests and error ellipse computation and analysis. Examines least squares adjustment and analysis of differential leveling, triangulations, trilateration, traverse and network observations.

Prerequisites: GEO A364 with a minimum grade of C.

GEO A369 Cadastral Surveys 3 Credits

Discusses the United States Public Land Survey System with emphasis on Alaska: sectionalized land subdivision, corner restoration, resurveys, evidence, sources for legal research, and current BLM procedures and regulations.

Prerequisites: GEO A267 with a minimum grade of C.

GEO A410 High-Density Surveying 3 Credits

Introduces principles of high-density surveying, outlines theory and practice of collection and processing of high-density spatial data (point clouds). Covers the use of automated photogrammetric and structure from motion (SFM) techniques, airborne LiDAR, terrestrial and mobile laser scanners.

Prerequisites: GEO A357 with a minimum grade of C.

GEO A420 Point Cloud Analysis 3 Credits

Introduces principles of point cloud data analysis for geospatial applications. Outlines theory and practice of processing of point clouds, generated from automated photogrammetric and structure from motion (SFM) techniques, airborne LiDAR, terrestrial and mobile laser scanners. Covers theoretical and practical aspects of high-density spatial data analysis including classification of LiDAR data, point cloud fusion, surface generation, shape fitting, and feature extraction.

Prerequisites: GEO A410 with a minimum grade of C and GIS A301 with a minimum grade of C.

GEO A433 Hydrographic Surveying 3 Credits

Provides students with knowledge of and skills to apply physical principles, instrumentation, data analysis methods, and visualization techniques associated with hydrographic surveying, chart publication, and related marine measurement practices of government and industry.

Prerequisites: GEO A266 with a minimum grade of C or concurrent enrollment.

GEO A457 Boundary Law II 3 Credits

Focuses on Alaskan survey history and case law, Alaska statutes and administrative code, writing legal descriptions, and the standards of practice for surveying in Alaska.

Prerequisites: GEO A369 with a minimum grade of C.

GEO A460 Geomatics Capstone Project 3 Credits

Utilizes techniques of research, design, data compilation, analysis and mapping learned throughout the geomatics curriculum to complete a geomatics capstone project. Addresses professional standards and ethical concerns for geomatics professionals.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and department approval

Attributes: UAA Integrative Capstone GER.

GEO A466 Geopositioning 3 Credits

Introduces the theory and practice of global positioning systems, primarily global navigation satellite systems (GNSS). Examines data collection, quality assessment, analysis and adjustment.

Prerequisites: GEO A364 with a minimum grade of C and GEO A359 with a minimum grade of C.

GEO A490 Selected Advanced Topics in Geomatics 1-6 Credits

Explores advanced theoretical or practical concepts in geomatics. Specific course content is determined according to student needs, developments in technology or licensing requirements.

Special Note: May be repeated four times for credit with change of subtitle.

Prerequisites: GEO A246 with a minimum grade of C and GIS A201 with a minimum grade of C.

German (GER)

Courses

GER A101 Elementary German I 4 Credits

Introductory course for students with no previous knowledge of the German language. Develops listening, speaking, reading, and writing skills in German for effective communication at the elementary level. Students gain understanding of basic cross-cultural perspectives. Course conducted in German.

Attributes: UAA Humanities GER.

GER A102 Elementary German II 4 Credits

Continuation of introductory course. Further develops elementary listening, speaking, reading, and writing skills in German for effective communication. Enhances appreciation of cross-cultural perspectives. Course conducted in German.

Prerequisites: GER A101.

Attributes: UAA Humanities GER.

GER A105 Conversational Skills Maintenance I 1 Credit

A maintenance and skills enhancement course at the elementary level, designed primarily to help students of German retain what they have learned. With the focus on oral communication, the course emphasizes speaking, listening comprehension, and vocabulary building.

Special Note: May be repeated once for credit.

Registration Restrictions: Proficiency as after one semester of college-level or one year of high school study in German.

May Be Stacked With: GER A205 and GER A305

GER A201 Intermediate German I 4 Credits

Intermediate course for students with basic knowledge of German. Enhances listening, speaking, reading, and writing skills for effective communication at the intermediate level. Students critically examine diverse cultural perspectives. Course conducted in German.

Prerequisites: GER A102.

Attributes: UAA Humanities GER.

GER A202 Intermediate German II 4 Credits

Continuation of first semester in intermediate German. Further develops listening, speaking, reading, and writing proficiency for effective communication and in preparation for advanced study of German. Students interpret diverse cultural perspectives. Course conducted in German.

Prerequisites: GER A201.

Attributes: UAA Humanities GER.

GER A205 Conversational Skills Maintenance II 1 Credit

A maintenance and skills enhancement course for intermediate students of German, designed primarily to help them retain and solidify what they learned in Elementary German. With the focus on communication, the course emphasizes speaking, listening comprehension, and vocabulary building.

Special Note: May be repeated once for credit.

Registration Restrictions: Proficiency as after two semesters of college-level or two years of high school study in German.

May Be Stacked With: GER A105 and GER A305

GER A301 Advanced German I 4 Credits

Advanced German course in refining listening, speaking, reading, writing, and analytical skills for effective interaction in communicatively complex situations. Students critically analyze diverse cultural topics.

Special Note: Course conducted in German.

Registration Restrictions: If prerequisite not met, students can gain entrance to course with departmental approval.

Prerequisites: GER A202 with a minimum grade of C.

Attributes: UAA Humanities GER.

GER A302 Advanced German II 4 Credits

Continuation of first semester in advanced German. Further refines listening, speaking, reading, writing, and analytical skills for effective interaction in communicatively complex situations. Students critically analyze diverse cultural topics.

Special Note: Course conducted in German.

Registration Restrictions: If prerequisite not met, students can gain entrance to course with departmental approval.

Prerequisites: GER A301 with a minimum grade of C.

Attributes: UAA Humanities GER.

GER A305 Conversational Skills Maintenance III 1 Credit

A maintenance and skills enhancement course at the advanced level, designed primarily to help students of German to retain and to consolidate what they have learned. With the focus on oral communication, the course emphasizes speaking, listening comprehension and vocabulary building.

Special Note: May be repeated once for credit. Course conducted in German.

Registration Restrictions: Proficiency as after four semesters of college-level or four years of high school study in German.

May Be Stacked With: GER A105 and GER A205

GER A310 Selected Topics: Literary Trends and Traditions 3 Credits

Focuses on diverse literary traditions of multiple German-speaking communities. Critical analysis through a variety of disciplinary methodologies (e.g. historical, cultural, artistic); terminology also explored and developed. Enhances German language skills in writing, reading, speaking, listening and cultural literacy.

Special Note: May be repeated for credit with a change of subtitle. Course conducted in German.

Prerequisites: GER A302 with a minimum grade of C.

GER A432 Topics in Literatures and Cultures of the German-Speaking Countries 3 Credits

Focuses on the intensive study of authors, literary movements, periods and genres in their historical and cultural contexts. Enhances German language skills in reading, listening, writing, speaking, and cultural literacy.

Special Note: May be repeated three times for credit with change of subtitle. Course conducted in German.

Prerequisites: GER A302 with a minimum grade of C.

GER A490 Selected Topics in German Literature 3 Credits

An advanced course for students interested in German literature with sufficient language proficiency to read and discuss assigned readings in German. Focus may be on periods, genres, individual authors, groups of authors, movements, works from different periods dealing with the same topics, or individual works.

Special Note: Will be offered alternate semesters or years. May be repeated for credit if topic varies. Course conducted in German.

Registration Restrictions: Three years of college German or equivalent.

Guidance (GUID)

Courses

GUID A104 Student Association Leadership I 1-3 Credits

Survey of student leadership topics including techniques of organizational planning, management, program planning, budgeting, group dynamics, communication and leadership theories and techniques. Application of techniques through program/service projects utilizing the student association as a laboratory.

GUID A150 Creating Success in College 3 Credits

Designed to assist incoming students make a successful transition from high school, home or the workplace to college. Adopts a seminar approach requiring students to use a textbook, listen to lectures, participate in discussions, activities, and complete a variety of written and oral assignments. Adjustment and transition issues -- academic, career, intrapersonal and interpersonal -- are addressed with a structured, content-based curriculum, flexible enough to promote the exploration and resolution of individual concerns.

GUID A150A Survival Skills/College 1 Credit

Participation in a variety of activities including, reading, notetaking and follow-up, large and small group discussions and activities, short written assignments and/or quizzes. Kenai Peninsula College

Health (HLTH)

Courses

HLTH A101 Introduction to Health Occupations 3 Credits

Introduces basic knowledge and skills of health care occupations including principles of infection control, medical office procedures, general patient care, professionalism, cardiopulmonary resuscitation and first aid. Provides laboratory component for development of associated clinical skills. Includes introduction to health care facilities and careers in health care.

Health Care Assisting (HCA)

Courses

HCA A105 Certified Nurse Aide 6-8 Credits

Prepares the student to be an Alaska State Certified Nurse Aide. Includes CPR training, medical terminology, basic anatomy, first aid and skills labs. Students receive on-site clinical training at local health care facilities.

Registration Restrictions: English placement: WRTG A090 or higher; Math placement: MATH A055 or higher.

Health Science (HS)

Courses

HS A210 Introduction to Environmental Health 3 Credits

Provides an introduction to the field of environmental health including health effects of global climate change. Reviews agents of environmental disease and public health applications.

HS A220 Core Concepts in the Health Sciences 3 Credits

Orientation to health issues in the United States and Alaska. Explores basic dynamics of health and illness, transition from infections to chronic illness, measures of population health and overall health care delivery system. Examines public health's history, goals and factors related to health across the socio-ecological model (including medical, psychological, socio-cultural, economic and environmental factors).

HS A230 Introduction to Global Health 3 Credits

Provides an introduction to the field of global health with a focus on links between health and economic and social development. Reviews the global burden of disease as well as the impact of culture on health.

HS A326 Introduction to Epidemiology 3 Credits

Provides an introduction to epidemiologic concepts and how epidemiologists use the scientific method to better understand the health status of human populations. Addresses disease surveillance, control of infectious and chronic diseases, selection of appropriate study designs for investigation of health determinants, and critical evaluation of epidemiologic studies and health policies.

Prerequisites: HS A220.

HS A345 Planning and Implementation of Health Education Programs 3 Credits

Theory and practice of program planning and implementation for health education and health promotion programs. Focuses on the use of educational strategies and methods to facilitate the development of policies, procedures, interventions, and systems that support the health of individuals, groups, and communities.

Prerequisites: HS A220.

HS A370 Medical Sociology 3 Credits

A historical and contemporary overview of selected social, political, and economic factors that influence the provision of health care in America. Focuses on the relationship between health care and race, sex, social stratification, and geographical location. Brief international comparisons with alternative for-profit and not-for-profit national health care systems.

Crosslisted With: SOC A370.

Prerequisites: SOC A101.

HS A420 Introduction to Program Evaluation 3 Credits

Introduces the theory and practice of program evaluation for applied health and human services settings.

Registration Restrictions: Junior or senior status and departmental approval

Crosslisted With: HUMS A420

HS A433 Health Education: Theory and Practice 3 Credits

Provides the theoretical foundation for health education and health promotion. Develops students' abilities to design and deliver health education programs.

Registration Restrictions: Faculty permission

Crosslisted With: NS A433

Prerequisites: HS A220 with a minimum grade of C or NS A300 with a minimum grade of C.

HS A463 Physician Assistant Clinical Clerkship I 12 Credits

The first of a two-part course that provides clinical practice in selected institution-based or specialty practice settings, such as psychiatry, dermatology, emergency medicine, orthopedics, surgery, or gynecology and obstetrics.

Registration Restrictions: MEDEX 469. Acceptance into the University of Washington MEDEX Northwest Physician Assistant Program or by instructor permission.

HS A464 Physician Assistant Clinical Clerkship II 12 Credits

The second of a two-part course that provides clinical practice in selected institution-based or specialty practice settings, such as psychiatry, dermatology, emergency medicine, orthopedics, surgery, or gynecology and obstetrics.

Registration Restrictions: Acceptance into the University of Washington MEDEX Northwestern Physician Assistant Program.

Prerequisites: HS A463.

HS A465 Physician Assistant Family Practice Clerkship I 12 Credits

The first part of a two-course sequence that encompasses the treatment of patients in all age groups. Focus is on health maintenance, preventive care, and the psychosocial aspects of illnesses as they relate to the patient and his/her family. Students will develop the skills necessary to evaluate, manage, and monitor common health complaints and problems.

Registration Restrictions: MEDEX 464. Acceptance into the University of Washington MEDEX Northwest Physician Assistant Program.

HS A466 Physician Assistant Family Practice Clerkship II 12 Credits

The second part of a two-course sequence that encompasses the treatment of patients in all age groups. Focus is on health maintenance, preventive care, and the psychosocial aspects of illnesses as they relate to the patient and his/her family. Students will develop the skills necessary to evaluate, manage, and monitor common health complaints and problems.

Registration Restrictions: MEDEX 465. Acceptance into the University of Washington MEDEX Northwest Physician Assistant Program.

HS A490 Selected Topics: Health Care Issues in Alaska 1-6 Credits

Provides specialized course content for health care professionals in Alaska. Topics covered will be of special interest to practitioners in both rural and urban settings. Subjects will be drawn from current health care priority areas including diseases specific to Alaska, substance abuse, behavioral health, and appropriate health care practices.

Registration Restrictions: Successful completion of MEDEX NW first year courses or instructor permission.

HS A491 Health Issues in Alaska 3 Credits

Describes historical to present health status of Alaskans, emphasizing health disparities. Students research and implement strategies to reduce risk through health behavior change; evaluate clinical practices using quality measures to improve care quality; and explore social, cultural, and economic factors related to health policy and the clinician's role in health advocacy.

Registration Restrictions: Health sciences physician assistant track major or instructor permission

Prerequisites: HS A463 or HS A465.

Attributes: UAA Integrative Capstone GER.

HS A492 Senior Seminar: Contemporary Health Policy 3 Credits

Focuses on contemporary health policy issues with an emphasis on population-level public policies and health disparities.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing

Prerequisites: HS A220 and HS A326.

Attributes: UAA Integrative Capstone GER.

HS A495 Health Sciences Practicum 3 Credits

Applies health sciences and health education knowledge and skills to specific assigned projects within a community health organization. A minimum of 90 hours of work with the community organization is required.

Special Note: May be repeated once for a total of 6 credits.

Registration Restrictions: Health sciences major and junior standing

Prerequisites: HS A220 and HS A345.

HS A498 Senior Project in Health Sciences 3 Credits

Individual senior projects completed under the mentorship of a faculty advisor. May be repeated once as part of a two-semester sequence with initial results, an outline, and bibliography presented at the end of the first semester and a final paper at the end of the second.

Special Note: May be repeated once for a total of 6 credits.

Registration Restrictions: Senior standing. Approval by the faculty member acting as project advisor.

Prerequisites: HS A220 and HS A345 and (HS A420 or concurrent enrollment or HUMS A420 or concurrent enrollment).

HS A499 Senior Thesis in Health Sciences 1-3 Credits

Individual thesis projects completed under the mentorship of a faculty advisor.

Special Note: May be repeated once for a maximum of 6 credits.

Registration Restrictions: Senior standing. Approval by the faculty member acting as thesis advisor.

Prerequisites: HS A220.

HS A605 Public Health and Society 3 Credits

Incorporates behavioral and social science concepts in analyzing a variety of public health issues nationally, in Alaska and the circumpolar north. Presents how socioeconomic status, culture, race/ethnicity, age, and gender relate to health and disease outcomes and quality of life. Provides knowledge on health promotion and disease prevention interventions.

Registration Restrictions: Admission to MPH program or faculty permission.

HS A610 Environmental and Occupational Health 3 Credits

Provides an in-depth understanding of environmental factors, including biological, physical, chemical and occupational factors that affect the health of a community. Combines an overall ecological concern with specific elements related to individual and community health, emphasizing the interrelatedness of the two.

Registration Restrictions: Admission to MPH program or faculty permission.

HS A615 Health Services Administration 3 Credits

Provides students with knowledge and tools to understand the planning, organization, administration, management, evaluation and policies of public health programs in the U.S. and particularly Alaska. Applies an epidemiological model for health services delivery, strategic planning, health care quality management, performance standards, interagency cooperation, human resource management and ethics.

Registration Restrictions: Admission to MPH program or faculty permission.

HS A624 Circumpolar Health Issues 3 Credits

Provides a critical analysis of key circumpolar health issues, with a particular emphasis on the application of current research to professional practice, programs and policy. Aims to develop and demonstrate, among the students, a level of professionally sophisticated critical analysis skills, problem-solving abilities, and expertise in public health issues most relevant to Alaska and other circumpolar regions. Provides opportunity for students to explore these issues within an Alaskan context in their assignments.

Registration Restrictions: Admission to MPH program or faculty permission.

HS A625 Biostatistics for Health Professionals 3 Credits

Reviews principles of statistical reasoning and quantitative skills for analyzing health data. Illustrates descriptive and inferential statistics. Addresses multivariate parametric and non-parametric statistical tests. Compares methodological techniques and the choice of appropriate statistical methods to answer health research questions. Emphasizes interpretation of statistical results in public health research and practice.

Registration Restrictions: Graduate standing or instructor permission, and a grade of C or better in undergraduate statistics course

HS A626 Principles of Epidemiology 3 Credits

Presents the study of patterns of disease and injury in human populations and the application of this study to the control of health problems. Introduces students to the basic principles and study designs of epidemiology. Covers the application of epidemiologic methods to the understanding of the occurrence and control of conditions such as infectious and chronic diseases, psychological and behavioral disorders, community and environmental health hazards, accidents, and genetic conditions.

Registration Restrictions: Graduate standing or instructor permission.

HS A628 Program Evaluation 3 Credits

Explores the principles and methods of conducting evaluation of health-related programs. Discusses topics such as conducting community needs assessment, program development, evaluation types and models, evaluation designs, politics and ethics of conducting evaluation in community-based settings, and how to effectively communicate the process involved in evaluation and the findings to stakeholders.

Registration Restrictions: Admission to MPH or MSW program or faculty approval; MSW students must have successfully completed the MSW foundation requirements.

Crosslisted With: SWK A628

HS A629 Public Health Research Tools and Methods 4 Credits

Introduces basic principles and methods of health-related research from its conception to analysis and evaluation. Provides an overview of quantitative and qualitative research methods and issues related to their reliability and validity. Provides hands-on training of quantitative and/or qualitative analytical software and completion of CITI Human Subjects Research Education course in lab.

Registration Restrictions: Admission to MPH program or faculty permission.

Prerequisites: HS A625 with a minimum grade of B and HS A626 with a minimum grade of B.

HS A630 Public Health Emergencies and Disasters 3 Credits

Explores public health issues concerning natural and human-generated disasters and emergencies that occur in Alaska, the U.S., and different parts of the world. Covers topics on geophysical and weather-related problems, infectious diseases, war, and related concerns. Addresses prevention, mitigation and public health interventions, which include planning, preparedness, response, and recovery strategies, as well as socio-economic, political, legal and ethical challenges.

Registration Restrictions: Admission to MPH program or faculty permission.

HS A648 Motivational Interviewing 3 Credits

Motivational Interviewing (MI) is an empirically-supported, person-centered, goal-oriented approach for facilitating change by exploring & resolving ambivalence. With background lectures on the theoretical and empirical bases of MI, class sessions emphasize demonstration and practice of MI skills and strategies for diverse behavioral applications (e.g., addictions, health promotion, chronic disease management).

Registration Restrictions: Graduate standing. PSY A648 and SWK A648

HS A654 Cross-Cultural Health Issues 3 Credits

Explores concepts of culture, cultural values, ethnocentrism, and topics related to health, illness, and healthcare delivery. Focuses on cultural competency: how to better understand health behaviors influenced by culture, cross-cultural communications, perceptions of illness and disease, as well as challenges and barriers that are encountered.

Registration Restrictions: Graduate standing and instructor approval

HS A655 Global Health and Development 3 Credits

Overview of global health issues and determinants of health, primarily in lesser developed countries. Covers maternal and child health, reproductive health, nutrition, infectious diseases, and environmental health issues. Explores intervention strategies and the impact of social, cultural, political, and economic factors.

Registration Restrictions: Graduate standing and instructor approval

HS A683 Innovative Practices in Telehealth 3 Credits

Provides an overview of telehealth with an emphasis on telebehavioral health in Alaska. Includes topics on the history of telehealth and current legal, technical and logistical considerations to prepare leaders in the expanding field of telehealth. Includes hands-on experience with telehealth technology and clinical exercises.

Registration Restrictions: Graduate standing or instructor permission

Crosslisted With: SWK A683

HS A690 Selected Topics in Public Health 1-4 Credits

Focuses on special, emerging, current, local, and other topics in public health.

Special Note: May be repeated for credit with different subtitles.

Registration Restrictions: Department permission.

HS A698 MPH Project Practicum 1-5 Credits

The MPH Project Practicum culminates a program of advanced study and evidences a high degree of scholarly and professional competence. It serves as the basis for evaluating the student in the area of evidence-based professional public health service.

Registration Restrictions: Admission to the MPH program and academic advisor approval.

HS A699 Thesis Practicum 1-5 Credits

The thesis practicum culminates a program of advanced study and should evidence a high degree of scholarly and professional competence. It serves as the basis for evaluating the capability of its author in the areas of applied research and professional practice. The thesis practicum is a reflection of the student's capabilities, with the help and guidance of the faculty and appropriate community members. The student's work is reviewed by her/his thesis committee to judge the author's scholarship and professional presentation, and to ascertain that the student has demonstrated his/her knowledge and ability to receive the Master's Degree.

Registration Restrictions: Admission to MPH program and academic advisor approval.

History (HIST)

Courses

HIST A101 Western Civilization I 3 Credits

Surveys major developments in Western Civilization from its origins in the ancient Near East to 1650. Emphasizes key social, political, economic, intellectual and cultural characteristics and developments.

Attributes: UAA Humanities GER.

HIST A102 Western Civilization II 3 Credits

Surveys major developments in Western Civilization from 1650 to the present. Emphasizes key social, political, economic, intellectual and cultural characteristics and developments.

Attributes: UAA Humanities GER.

HIST A121 East Asian Civilization I 3 Credits

A survey of the major historical, cultural and social developments of Chinese, Japanese and Korean civilization from their prehistoric origins through approximately 1600 (the decline of Ming China, the unification of Japan under the Tokugawa and the end of the Japanese invasions of Korea).

Attributes: UAA Humanities GER.

HIST A122 East Asian Civilization II 3 Credits

A survey of the major historical, cultural and social developments of East Asian civilization from approximately 1600 (the rise of Qing China, the unification of Japan under the Tokugawa and the revival of the Yi Dynasty in Korea) through the 21st century.

Attributes: UAA Humanities GER.

HIST A131 History of the United States I 3 Credits

Presents a chronological overview of the history of North America from the pre-colonial era through the U.S. Civil War. Examines social, cultural, political, and economic forces that have shaped the country during the period.

Attributes: UAA Humanities GER.

HIST A132 History of the United States II 3 Credits

Presents a chronological overview of United States history from Reconstruction to the present. Examines social, cultural, political and economic forces that have shaped the country during the period.

Attributes: UAA Humanities GER.

HIST A225 Ancient History 3 Credits

A survey of the origins and development of western civilization from the neolithic revolution in the ancient Near East through the end of the Roman Empire. Emphasis on interrelationships of political, social, economic, cultural, and intellectual movements in various cultures.

Registration Restrictions: HIST A101 recommended.

HIST A226 Medieval History 3 Credits

A survey of the evolution of western civilization from end of the Roman Empire to beginnings of the Renaissance. Emphasis on interrelationships of political, social, economic, cultural, and intellectual movements.

Registration Restrictions: HIST A101 recommended.

HIST A237 American Civil War 3 Credits

Study of North-South differences causing American Civil War, war itself in considerable detail, and legacy of that war for today.

HIST A238 Black History I 3 Credits

Afro-American history from colonial times to 1865. Social, economic, psychological, religious, and racial aspects of Africa. Slave trade, slavery, slave trading nations, and Civil War. Impact of various racial theories and practices on black/white relations.

HIST A244 Studies in Film History 3 Credits

Selected topics in motion picture history. Ranges from genre studies (musicals, comedies, science fiction) to special areas of film history (animation, special effects, major stars and studios, significant directors). Subtitle varies.

Special Note: May be repeated once for credit with a change of subtitle.

HIST A257A The Alaska-Yukon Gold Rush 3 Credits

Nineteenth-century gold rushes in California, Nevada, the Rocky Mountains, Black Hills (Dakota Territory), and British Columbia are examined, culminating in the Alaska-Yukon Gold Rush Era of 1880-1920.

HIST A261 Russian History 3 Credits

A survey of Russian history from early origins to modern Russia. Topics include Kievan Rus; Mongol Era; Rise of Moscow; Romanov Russia and Serfdom; Revolutionary Russia; Soviet Union and Russian Federation.

HIST A306 The Roman Empire 3 Credits

The Roman Empire from the assassination of Julius Caesar to the "fall" of the Empire in AD 476. Its principal focus is upon the political and social history of the Empire.

Prerequisites: HIST A101 and HIST A225.

HIST A308 Europe in the High Middle Ages 3 Credits

An analysis of key issues in Europe from roughly 1000-1400, including feudal and manorial structures, religious developments, such as new monastic orders and the growth of papal power, intellectual and economic developments such as the rise of scholasticism and book-keeping, and political and social developments. Particular emphasis will be placed on the impact of the Crusades, the Twelfth Century Renaissance, religious minorities, dissent, and rural and urban life.

Registration Restrictions: Appropriate score on English placement test, SAT Verbal Section, or ACT English Test will waive the WRTG A111 or WRTG A211 prerequisites.

Prerequisites: HIST A101 with a minimum grade of C and (WRTG A111 or WRTG A211).

HIST A310 Renaissance/Reformation Europe 3 Credits

Examines the key political, social, economic and cultural developments in Renaissance and Reformation Europe. Emphasis will be placed on the medieval legacy; Renaissance art, power and family life; European encounters and conquests; the emergence of a new world economy; religious reform and revolution; and daily life in Reformation Europe.

Prerequisites: HIST A101.

HIST A312 Early Modern Europe: 1600-1789 3 Credits

Examines the key political, social, economic and cultural developments in Early Modern European history. Special emphasis will be placed on religious warfare and the military revolution; absolutism and constitutionalism; colonies and empires; commercial and agricultural revolutions; scientific revolution and enlightenment; witchcraft; social estates and daily life; and the Ancien Regime on the eve of Revolution.

Prerequisites: HIST A102.

HIST A314 Nineteenth Century Europe 3 Credits

Examines the key political, social, economic and cultural developments in 19th century Europe. Special emphasis will be placed on the French and Napoleonic revolution; restoration and reaction; industrialization and urbanization; romanticism, liberalism and socialism; nationalism and national unification; imperialism; fin de siècle culture; and daily life.

Prerequisites: HIST A102.

HIST A316 Twentieth Century Europe 3 Credits

Examines the key political, social, economic, intellectual and cultural developments in 20th century Europe. Special emphasis will be placed on the broad historical forces at work during the 20th century--such as war, revolution, fascism, communism, democracy, modernization, decolonization and globalism - and how both elites and ordinary people responded to a changing world.

Prerequisites: HIST A102.

HIST A321 Modern China 3 Credits

Chinese history from the middle of the Qing (Manchu) Dynasty, about 1800, through the 1990s. Designed to provide a broad understanding of the historical, cultural, and social development of China as it made the transition to a modern state.

Prerequisites: HIST A121 or HIST A122.

HIST A322 Modern Japan 3 Credits

Japanese history from the last decades of the Tokugawa Shogunate, about 1800, through the 1990s. Designed to provide a broad understanding of the historical, cultural, and social development of Japan as it made the transition to a modern state.

Prerequisites: HIST A121 or HIST A122.

HIST A325 Northeast Asia in 21st Century 3 Credits

An interdisciplinary examination and analysis of Northeast Asia covering China, the Koreas, and Japan designed to provide students with the means to understand how the societies of this region have developed separate and distinct identities despite their common cultural and philosophic roots.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses.

Crosslisted With: INTL A325 and PS A325

Attributes: UAA Integrative Capstone GER.

HIST A330 Russia in East Asia 3 Credits

History of the relationships between Russia and its neighbors in East Asia and the Pacific. Among the major themes to be explored are the impact of the Mongol conquest, contact and colonization in the "borderlands," historical debates on the importance of East Asia and the Pacific to Russia, and the articulation and pursuit of Russian geopolitical interests in the region.

Prerequisites: HIST A102 or HIST A121.

HIST A336 Latin America to 1800 3 Credits

An analysis of pre-Columbian cultures, the impact of the arrival of Europeans on indigenous societies in Mesoamerica and South America, and the societies that emerged out of conquest and colonization. Emphasis will be placed on labor, economy, religion, culture, society, and daily life up to 1800, as well as the beginning of Independence movements.

Registration Restrictions: Appropriate score on English placement test, SAT Verbal Section, or ACT English Test will waive the WRTG A111 or WRTG A211 prerequisite.

Prerequisites: HIST A101 with a minimum grade of C and (WRTG A111 or WRTG A211).

HIST A338 Modern Latin America 3 Credits

Analyzes Latin American history from the Independence movements of the nineteenth century to the present, including the formation of states, the development of national identities, and Latin America's connection to growing global economies. Emphasizes post-Independence political and social conflicts, social reforms and revolutions, the impact of modernization and industrialization, and cultural and artistic developments.

Registration Restrictions: Appropriate score on English placement test, SAT Verbal Section, or ACT English Test will waive the WRTG A111 prerequisite.

Prerequisites: HIST A101 with a minimum grade of C or HIST A102 with a minimum grade of C or HIST A131 with a minimum grade of C or HIST A132 with a minimum grade of C and WRTG A111 with a minimum grade of C.

HIST A341 History of Alaska 3 Credits

An introduction to Alaska and its relationship to America and the world, including Alaska geography, Alaska Native anthropology, and a detailed chronological history of the 49th state. Topics include Russian exploration, occupation, and management; Native-Russian relations; the Alaska Purchase; U.S. military; missionaries; gold rushes; territorial era; statehood; Native land claims and corporations; oil development and the disposition and management of Alaska lands.

Registration Restrictions: HIST A132 equivalent accepted with instructor permission.

Prerequisites: HIST A132.

Attributes: UAA Humanities GER.

HIST A346 History of Native Peoples of United States and Canada 3 Credits

An examination of themes in the history of indigenous peoples of the U.S. and Canada from pre-contact through the 20th century, with an emphasis on Native voices and perspectives.

Prerequisites: HIST A131 or HIST A132.

HIST A355 Major Themes in US History 3 Credits

Examines major themes that have shaped and impacted American history and contemporary society. Such themes may include, but are not limited to, democracy, global relations, and multiculturalism. Course emphasizes reading and analysis of primary sources to discern and evaluate the human experience.

Prerequisites: HIST A131 and HIST A132.

HIST A360 Modern Economic History 3 Credits

Examines the role of geography, institutions, technology, and trade in the evolution of the modern economy. Emphasizes the long-run economic performance of Europe and the US. Also covers historic differences between the West and other parts of the world.

Crosslisted With: ECON A360.

Prerequisites: HIST A102 and ECON A201.

HIST A377 Historiography: The Uses and Abuses of History 3 Credits

Explores how historians "do" history by examining the various historical methods, theories, and approaches used to interpret and to understand the human past and its significance. Investigates the relationships between experiencing, remembering, and reconstructing the past.

Prerequisites: (HIST A101 and HIST A102) or (HIST A131 and HIST A132).

HIST A390 Themes in World History 3 Credits

A broadly comparative and interdisciplinary analysis of fundamental or universal aspects of the human experience from prehistory to the present.

Special Note: May be repeated once for credit with a change of subtitle.

Registration Restrictions: Junior or higher standing. Completion of GER Tier 1 (basic college-level skills) courses.

Prerequisites: HIST A102 with a minimum grade of C and (HIST A122 with a minimum grade of C or HIST A132 with a minimum grade of C).

Attributes: UAA Integrative Capstone GER.

HIST A401 The History of Warfare 3 Credits

The history of warfare from the classical age to the present. Examines theories of the origins of war; social, economic, and political organization for war; technology and weapons; administration and logistics; asymmetrical conflict; strategic and tactical systems; war and revolution; and the impact of nuclear weapons.

Prerequisites: HIST A101 and HIST A102.

HIST A402 The Second World War 3 Credits

Examines the origins of the war in Europe and Asia. Emphasizes the grand strategies of the belligerents, the principal military operations, the relationship between science and war, the mobilization of societies and economies for total war, wartime diplomacy, and postwar settlements.

HIST A406 Medieval Iberia 3 Credits

An analysis of key issues in Iberia from roughly 700 to 1492, including changing relationships between communities of Christians, Muslims and Jews. Particular emphasis will be placed on the Reconquista, the development of different kingdoms, rural and urban life, the growth of military orders, the unification of crowns, and Iberian expansion.

Prerequisites: (WRTG A111 with a minimum grade of C or WRTG A211 with a minimum grade of C) and HIST A101 with a minimum grade of C.

HIST A408 Early Modern Iberia 3 Credits

An analysis of key issues in Iberia from roughly 1450 to 1808, including imperial expansion and religious, political and social developments. Particular emphasis will be placed on the impact of ideologies of universal monarchy, the Union of Crowns, the Inquisition, rural and urban life, religious minorities, and the economics of empires.

Prerequisites: (WRTG A111 with a minimum grade of C or WRTG A211 with a minimum grade of C) and HIST A101 with a minimum grade of C.

HIST A411 History of Modern Germany 3 Credits

Examines the key political, social, economic and cultural developments in German history from 1850 to present. Focuses on 19th century unification, Imperial Germany, the Weimar Republic, Nazism and World War II, division and the Cold War, the two postwar Germanies, and contemporary re-unified Germany.

Prerequisites: HIST A102.

HIST A418 Tudor and Stuart England 3 Credits

The history of England from the accession of Henry VII to the death of Anne. Major topics are the development of modern instruments of government, the English Reformation, and the ensuing religious struggle, the Civil War and the Glorious Revolution, and the establishment of parliamentary government.

Prerequisites: HIST A101.

HIST A420 The Rise, Fall, and Reinvention of the Samurai 3 Credits

Analyzes the historical origins, rise to prominence, dominance and the fall of the warrior caste of Japan. Principal focus on the constant reinvention of the samurai and how the "spirit of the samurai" was used in Japan's modernization.

HIST A422 "Communist" China 3 Credits

Analyzes the historical origins, rise, struggles and eventual triumph of the Chinese Communist Party in 1949. Examines the wrenching upheavals of the People's Republic under Mao Zedong, "reform and opening up" under Deng Xiaoping and China's "rise" under subsequent generations of leadership to the present. Principal focus on the constant reinvention of Chinese communism to face perceived challenges in China's modernization.

HIST A423 Medieval Russian History 3 Credits

Explores the socio-economic, political, and cultural foundations of Medieval Russia beginning with ancient Slavic settlements and foreign invasions and concluding with the creation of the Romanov dynasty in the 17th century. Major topics include the impact of foreign invasions (e.g. Mongols), the influence of the Byzantine Empire, the rise of Muscovy, and the internal dynamics of Muscovite society.

Special Note: Fulfills non-western selective for history majors.

Prerequisites: HIST A101 with a minimum grade of C or HIST A102 with a minimum grade of C.

HIST A424 Imperial Russian History 3 Credits

Explores the socio-economic, political, and cultural foundations of Imperial Russia from the seventeenth century to the early twentieth century. Themes include the nature of autocracy, the "golden age" of the aristocracy, the role of serfdom, the rise of revolutionary ideology and action, the impact of war, and the relationship between state and society.

Prerequisites: HIST A102.

HIST A425 History of the Soviet Union 3 Credits

Explores the creation, maintenance, and collapse of the Soviet Union, beginning with the nineteenth-century antecedents of the Russian Revolutions of 1917. Examines major events, personalities, and ideas that played a leading role in constructing Soviet society from 1917 to 1991. Themes include the triumph of Bolshevism, the creation of "Soviet society," Stalinism and its legacies, and the dismantling of the Soviet regime.

Prerequisites: HIST A102.

HIST A427 Post-Soviet Culture and Society 3 Credits

Interdisciplinary examination and analysis of contemporary Russian culture and society. Explores major themes in post-Soviet society including shifting identities and changing social, cultural, political, and economic realities, and examines how these are expressed in a variety of contemporary sources. Conducted in English.

Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses and junior standing. Prerequisite HIST A102 or any RUSS prefix course.

Crosslisted With: RUSS A427

Prerequisites: HIST A102.

Attributes: UAA Integrative Capstone GER.

HIST A431 America: Colonies and Revolution 3 Credits

Presents American history from the early 1600s to 1801. The two main themes are the interaction between different ethnic and cultural groups, and the creation and development of various political, economic, social, and cultural institutions in the United States.

Prerequisites: HIST A131 with a minimum grade of C.

HIST A434 Early National Period, 1800-1850 3 Credits

Analyzes the political, economic, social, religious, and cultural developments in American history from 1800 to 1850. Topics include George Washington's Farewell Address, the Quasi War, the War of 1812, American economic development after 1815, transportation and communication improvements, the American System, the Indian Removal, expansion of Southern slavery, the Reform Movements, and the Second Great Awakening.

Prerequisites: HIST A131 with a minimum grade of C.

HIST A437 Slavery and the Civil War 3 Credits

Analyzes political, economic, ideological, social and cultural aspects of African slavery in the antebellum United States and the effects of slavery on American society. Topics include the start of western slavery, differences of slavery systems in various regions, changes to slave systems, slave resistance and culture, the coming of the Civil War, the Civil War battles, and the Reconstruction.

Prerequisites: HIST A131 with a minimum grade of C.

HIST A440 The American West Since 1850 3 Credits

Study of major topics in Western American history, including economic, political, social, and cultural themes, and the historiography of the American West.

Prerequisites: HIST A131 and HIST A132.

HIST A451 Gilded Age and Progressive Era America, 1877-1917 3 Credits

Examines the key political, social, economic and cultural developments in United States history from 1877 to 1917. Emphasis on the social and cultural developments that led to the rise of modern America: industrialization, reform movements, labor issues, and political evolution of the government.

Prerequisites: HIST A132.

HIST A452 America in War and Peace, 1917-1945 3 Credits

Examines nearly three decades in U.S. history characterized by the emergence of modern America, a process propelled by numerous crises. This course explores how the American people and their elected representatives responded to the multiple national emergencies of wars and depression as well as the critical political and cultural legacies of those three decades.

Prerequisites: HIST A132.

HIST A453 Cold War America, 1945-1992 3 Credits

An examination of the domestic history of the United States during the Cold War. Focuses on how the US status as a superpower and competition with the Soviet Union influenced the American economy, culture, politics and society. Special emphasis will be placed upon social movements, culture and politics.

Registration Restrictions: Sophomore standing or higher

Prerequisites: (WRTG A111 with a minimum grade of C or WRTG A211 with a minimum grade of C) and HIST A132 with a minimum grade of C.

HIST A454 United States History in the New Gilded Age: 1980s to the Present 3 Credits

Presents United States history from the 1980s to the present. Themes include American foreign relations, the end of the Cold War and the War on Terror, increasing levels of economic inequality, the decline of industrial labor, the rise of the service sector, and the changing nature of the nation's political, economic, social, and cultural institutions over the previous forty years.

Registration Restrictions: Completion of Written Communication Skills and Oral Communication Skills GER

Prerequisites: HIST A132 with a minimum grade of C.

HIST A464 U.S. Foreign Relations Since 1945 3 Credits

An examination of the history of U.S. foreign relations, broadly defined, since 1945, with a special emphasis on the global Cold War.

Registration Restrictions: Sophomore standing or higher

Prerequisites: (WRTG A111 with a minimum grade of C or WRTG A211 with a minimum grade of C) and HIST A132 with a minimum grade of C.

HIST A477 Senior Seminar 3 Credits

Research methodology for senior history majors culminating in preparation of a major research paper, utilizing primary and secondary research material on specific topics based on the expertise of department faculty.

Registration Restrictions: Junior standing.

Prerequisites: HIST A377.

HIST A478 Studies in Early American History 3 Credits

An examination of selected fundamental topics in early American history. Areas will be studied as student need and faculty expertise indicate. Subtitle varies.

Special Note: May be repeated twice for credit with a change of subtitle.

Prerequisites: HIST A131.

HIST A479 Studies in Modern American History 3 Credits

An intensive examination of selected fundamental topics in modern American history. Specific areas will be treated as student need and faculty expertise indicate. Subtitle varies.

Special Note: May be repeated twice for credit with a change of subtitle.

Prerequisites: HIST A131 and HIST A132.

HIST A486 Studies in Modern Europe 3 Credits

A study of selected important topics in modern European history including World War I, European Fascism and National Socialism, European Socialism, and others. Specific areas will be treated as student need and faculty expertise indicate. Subtitle varies.

Special Note: May be repeated twice for credit with a change of subtitle.

Prerequisites: HIST A102.

HIST A495 History Internship 1-3 Credits

Advanced application of historical writing and/or research skills in a professional setting within the historical discipline.

Special Note: May be repeated for a maximum of 6 credits.

Registration Restrictions: Admission to BA in History, Minor in History or instructor permission

Prerequisites: (HIST A101 with a minimum grade of B or HIST A102 with a minimum grade of B) and (WRTG A111 with a minimum grade of B or WRTG A211 with a minimum grade of B) and (HIST A121 with a minimum grade of B or HIST A122 with a minimum grade of B or HIST A131 with a minimum grade of B or HIST A132 with a minimum grade of B).

Honors (HNRS)

Courses

HNRS A191 Freshman Honors Tutorial 1 Credit

Offers freshman-level intensive reading, writing, and discussion relating to the content of another course with which it is associated; the associated course varies from term to term. Students receive additional instruction in interpreting texts, recognizing distinctions and explaining them in expository writing, and defending their opinions in class discussion.

Special Note: Subtitle varies; may be repeated once for credit with a different subtitle. Concurrent enrollment is required in the associated course whose title is the same as the subtitle of HNRS A191.

Registration Restrictions: Registration limited to students admitted to the Forty-Ninth State Fellows Program, and also open to students enrolled in the University Honors College who have permission to register from the University Honors College.

HNRS A192 Honors Seminar: Enduring Books 3 Credits

Honors seminar focusing on the directed reading of a single book of enduring significance.

Special Note: May be repeated once for credit under a different subtitle. May be used only once for GER Humanities.

Registration Restrictions: Registration limited to students admitted to the University Honors College, or to students who have permission to register from the University Honors College.

Attributes: UAA Humanities GER.

HNRS A291 Sophomore Honors Tutorial 1 Credit

Offers sophomore-level intensive reading, writing, and discussion relating to the content of another course with which it is associated; the associated course varies from term to term. Students receive additional instruction in examining arguments in the readings, demonstrating their grasp of questions in expository writing, and using these skills in class discussion.

Special Note: Subtitle varies; may be repeated once for credit with a different subtitle. Concurrent enrollment is required in the associated course whose title is the same as the subtitle of HNRS A291.

Registration Restrictions: Registration limited to students admitted to the Forty-Ninth State Fellows Program, and also open to students enrolled in the University Honors College who have permission to register from the University Honors College.

Prerequisites: HNRS A191 and HNRS A192.

HNRS A292 Honors Seminar in Social Science 3 Credits

Examines selected topics from a social science perspective. Exposes students to a broad range of social issues, and helps them to develop skills to examine and evaluate their world. Emphasizes research findings and skills, including the collection and analysis of both quantitative and qualitative data. Students will gain considerable experience communicating both orally and in writing.

Special Note: May be repeated once for credit under a different subtitle.

Registration Restrictions: Registration limited to students admitted to the University Honors College, or to students who have permission to register from the University Honors College.

Attributes: UAA Social Sciences GER.

HNRS A310 Community Service: Theory and Practice 3 Credits

Explores questions of service, community, and self, and includes guided volunteer service with a cultural organization, social service organization, or government agency.

Registration Restrictions: Sophomore or junior standing. Registration open to students admitted to University Honors College, to students who have permission to register from the University Honors College, and to students working on the Certificate in Civic Engagement.

HNRS A390 Special Topics Honors Seminar 3 Credits

A special topics seminar focusing on a theme generally outside the scope of those presented in non-seminar courses. The seminar's format is Socratic and requires student research addressing the seminar's topic. Course may be repeated once with different seminar topic.

Registration Restrictions: Students admitted to the University Honors College, or to students who have permission to register from said College. Completion of GER Tier 1 (basic college-level skills) courses.

HNRS A391 Junior Honors Tutorial 1 Credit

Offers junior-level intensive reading, writing, and discussion relating to the content of another course with which it is associated; the associated course varies from term to term. Students receive additional instruction in analyzing theoretical approaches in the readings, developing and arguing for a thesis in expository writing, and applying critical thinking to class discussion.

Special Note: Subtitle varies. Concurrent registration is required in the associated course whose title is the same as the subtitle of HNRS A391.

Registration Restrictions: Registration limited to students admitted to the Forty-Ninth State Fellows Program, and also open to students enrolled in the University Honors College who have permission to register from the University Honors College.

Prerequisites: HNRS A291 and HNRS A292.

HNRS A392 Honors Thesis Seminar 1 Credit

In-depth application of discipline research skills to a particular problem. Develops an understanding of research problems and research methods used by different disciplines.

Registration Restrictions: Registration limited to students admitted to the University Honors College, and to students who have permission to register from the University Honors College.

Prerequisites: HNRS A192 and HNRS A292 and HNRS A310.

HNRS A495 Honors Internship 1-6 Credits

Applying interdisciplinary knowledge and skills to a student internship project, through a variety of governmental and private settings both within and outside of Alaska.

Special Note: Repeatable once for credit with a change of internship venue.

Registration Restrictions: Permission from the University Honors College and approval by a faculty member acting as the internship advisor.

HNRS A498 Individual Research 1-6 Credits

Individual research project under the supervision of a faculty member. The project will include an academic literature review, experimental design, implementation, analysis, and written paper and/or presentation.

Special Note: May be repeated for a maximum of 6 credits.

Registration Restrictions: Permission from the University Honors College and approval by a faculty member acting as research project advisor

HNRS A499 Honors Thesis 3 Credits

Independent research under faculty supervision, including formulation of research topic, research and analysis, and defense.

Special Note: May be repeated for a maximum of 6 credits.

Registration Restrictions: Senior standing. Permission from the University Honors College and approval by a faculty member acting as thesis advisor.

Prerequisites: HNRS A392.

Human Services (HUMS)

Courses

HUMS A107 History and Systems of Human Services 3 Credits

Introduces historical foundations of the human service profession through the lens of formative legislation and service delivery systems.

HUMS A123 Community Education and Prevention in Substance Abuse 3 Credits

Presents knowledge and skills as tools in the development of community education and prevention programs in substance abuse.

HUMS A125 Intervention and Prevention of High Risk Behaviors in Adolescents 3 Credits

Provides an overview of brain development and its impact on behavior. Presents types of high risk behaviors in adolescents and approaches to prevention and intervention.

HUMS A155 Human Relations in the Workplace 3 Credits

Presents human relations skills appropriate in the workplace for professionals. Includes skills related to task group team membership and leadership, problem solving, workplace etiquette, and working within diverse groups.

HUMS A190 Holistic Approaches to Behavioral Health and Wellness 1-3 Credits

Introduces holistic and natural approaches to behavioral health and wellness. Explores various evidenced-based practices including indigenous, contemporary and global models of health and recovery.

Special Note: May be repeated for credit with a change in subtitle. This course cannot be used to fulfill degree requirements for the HUMS AAS or BHS degree.

HUMS A200 Introduction to Children's Behavioral Health 3 Credits

Covers ethics and ethical practices, self-care, confidentiality, mandatory reporting, overview of child and adolescent development, building and maintaining therapeutic relationships, boundaries, culturally responsive interventions, resiliency, communication, and additional behavioral health topics impacting treatment outcomes for children and adolescents.

Registration Restrictions: Department approval

Crosslisted With: DLS A200

HUMS A205 Teaching Social Skills to Youth in Children's Behavioral Health 3 Credits

Promotes an understanding and application of learning theory to communication strategies, teaching methods and crisis prevention interventions.

Registration Restrictions: Department approval

Crosslisted With: DLS A205

HUMS A206 Positive Behavioral Supports in Children's Behavioral Health 3 Credits

Extends knowledge of learning theory to functional behavior assessments of problem behaviors in children (age 0-18) and appropriate interventions. Examines how to develop behavior support plans using non-aversive interventions for challenging and problematic behaviors with children.

Registration Restrictions: Department approval

Crosslisted With: DLS A206

Prerequisites: DLS A205 or HUMS A205.

HUMS A223 Introduction to Paraprofessional Counseling I 3 Credits

Presents basic paraprofessional counseling skills and theories, focused upon a systematic approach to effective counseling. Presents skills organized into four categories: skills for understanding, skills for crisis intervention, skills for positive action, and trauma-informed care.

HUMS A224 Conflict and Collaborative Systems 3 Credits

Presents interpersonal conflict and collaboration through the social construction and general systems theoretical frameworks. Presents models to help manage and/or resolve conflict.

HUMS A256 Groups and Organizations 3 Credits

Introduces social, organizational and work-group behavior within a human services context. Examines group theory, dynamics and processes in a variety of applications.

HUMS A290 Selected Topics in Alcohol and Drug Counseling 0.5-3 Credits

Provides the most current education in the area of substance abuse counseling. Specific topics will vary.

HUMS A295A Human Services Practicum I 3 Credits

Involves placement in a community human service agency with emphasis on observation of agency structure and functioning, development of professional and inter-agency relationships, and application of beginning helping skills with agency clients. Includes a mandatory weekly in-class seminar and 125 hours completed in the field placement agency.

Registration Restrictions: GER Written Communication, human services major

Prerequisites: WRTG A111 with a minimum grade of C or concurrent enrollment and HUMS A107 with a minimum grade of C and HUMS A155 with a minimum grade of C and HUMS A223 with a minimum grade of C.

HUMS A295B Human Services Practicum II 3 Credits

Provides students with advancing levels of responsibility in direct client services and/or specialized activities/projects while increasing their professional development. Requires students to complete 125 hours of field placement in an agency setting and weekly classroom seminar.

Registration Restrictions: Human services major

Prerequisites: HUMS A295A with a minimum grade of C.

HUMS A321 Diversity Issues in Human Services Practice 3 Credits

Examines diversity from historical and current perspectives with an emphasis upon self-awareness. Incorporates the needs of diverse groups into human services best practices through readings, role-play and group activity.

HUMS A322 Introduction to Case Management in Human Services Practice 3 Credits

Focuses upon theory and application associated with service delivery, client assessment, case planning, implementation, evaluation and ethical decision making.

Prerequisites: HUMS A107 with a minimum grade of C and HUMS A223 with a minimum grade of C.

HUMS A324 Introduction to Paraprofessional Counseling II 3 Credits

Provides students both theory and skill development learning experiences designed to advance paraprofessional counseling skills.

Prerequisites: HUMS A223 with a minimum grade of C.

HUMS A333 Alternative Dispute Resolution 3 Credits

Provides a conceptual framework in alternative dispute resolution with emphasis on history, communication skills and ethics. Uses simulation exercises, including negotiation strategy and tactics, mediation process and techniques, and development of arbitration case theory presentation.

Registration Restrictions: Department approval

Prerequisites: HUMS A223 with a minimum grade of C and HUMS A224 with a minimum grade of C.

HUMS A334 Family Mediation 3 Credits

Examines the role of mediation in resolving conflict in domestic relations, family business situations and crisis situations within the community. Incorporates systems theory, mediation theories, principles and skills of mediation, different approaches to family mediation and current research.

Registration Restrictions: Departmental approval

Prerequisites: HUMS A333 with a minimum grade of C.

HUMS A350 Men and Masculinity Issues in Human Services Practice 3 Credits

Examines the historical, cultural and psycho-social perspectives of masculinity and male sex roles focusing on males in a human services setting emphasizing family, work, sexuality, and mental and physical health issues.

Registration Restrictions: Departmental approval

HUMS A352 Human Services Administration 3 Credits

Presents essential administrative approaches and skills associated with human services agency management. Focuses on leadership, evaluation, program planning and financial management.

Registration Restrictions: Admission to Bachelor of Human Services program

HUMS A353 Working with Individuals with Disabilities: A Human Service Perspective 3 Credits

Explores working with individuals with mental health and/or developmental disabilities. Examines current issues as well as a history of the changes in disability laws.

HUMS A354 Clinical Approaches to Substance Abuse 3 Credits

Presents a range of clinical interventions for the treatment of substance abuse. Highlights the differences in treatment methods for alcohol, stimulants and opioids.

Registration Restrictions: Junior or senior status and departmental approval

HUMS A385 Working with Traumatized Children 3 Credits

Covers differentiation between types of trauma that children can experience and how trauma may affect their treatment outcomes. Examines safe and supportive trauma-informed interventions, as well as strategies to reduce the effects of caregiver fatigue.

Registration Restrictions: Department approval

Crosslisted With: DLS A385

Prerequisites: DLS A200 or HUMS A200.

HUMS A390 Selected Topics in Human Service Practice 0.5-3 Credits

Provides the most current education in the area of Human Service practice. Specific topics will vary.

HUMS A412 Ethical Issues in Human Services Practice 3 Credits

Examines ethical issues in human services practice defined in the National Organization of Human Services (NOHS) Ethical Code. Focuses on client rights, confidentiality and worker responsibility.

Registration Restrictions: Admitted to the Bachelor of Human Services degree

HUMS A414 Advanced Case Management for Human Services Professionals 3 Credits

Examines the influence of personal worldviews on treatment, client assessment, treatment planning and evaluation. Focuses on theories and conceptualization as they relate to clients in the context of their environment. Identifies skills necessary for providing case management in specialty areas.

Registration Restrictions: Admitted to the Bachelor of Human Services degree

Prerequisites: HUMS A322 with a minimum grade of C.

HUMS A415 Advanced Human Services Systems 3 Credits

Explores human behavior in organizational and community systems. Examines the influence of public policy and legislation on human service delivery systems.

Registration Restrictions: Admitted to the Bachelor of Human Services degree

HUMS A416 Substance Abuse and the Older Adult 3 Credits

Addresses the issues related to older adults misusing alcohol, drugs, prescription medications and other substances. Emphasizes identification, assessment and intervention strategies. Highlights mental health issues related to an older population.

Registration Restrictions: Admitted to the Bachelor of Human Services degree or departmental approval

Prerequisites: HUMS A123 with a minimum grade of C and HUMS A223 with a minimum grade of C and HUMS A324 with a minimum grade of C.

HUMS A417 Substance Abuse Counseling for Human Service Professionals 3 Credits

Develops advanced counseling skills specifically required by human service professionals providing substance abuse treatment. Includes client assessment, diagnosis and treatment planning. Analyzes substance abuse treatment strategies.

Registration Restrictions: Admitted to the Bachelor of Human Services degree or with departmental approval

Prerequisites: HUMS A123 with a minimum grade of C and HUMS A223 with a minimum grade of C and HUMS A324 with a minimum grade of C.

HUMS A420 Introduction to Program Evaluation 3 Credits

Introduces the theory and practice of program evaluation for applied health and human services settings.

Registration Restrictions: Junior or senior status and departmental approval

Crosslisted With: HS A420

HUMS A435 Individual and Group Facilitation 3 Credits

Presents advanced facilitation skills enhancing the helping process used in both individual and group settings. Covers specific theoretical concepts, techniques and approaches appropriate to a broad range of human services delivery systems.

Registration Restrictions: Admitted to the Bachelor of Human Services degree or departmental approval

Prerequisites: HUMS A324 with a minimum grade of C.

HUMS A461 Crisis Intervention 3 Credits

Presents crisis intervention techniques focused on a systematic approach to effective crisis management. Examines crises in five categories: crisis causality, identification, intervention, treatment strategies and follow-up.

Registration Restrictions: Admitted to the Bachelor of Human Services degree or the minor in Human Services

Prerequisites: HUMS A324 with a minimum grade of C.

HUMS A495 Human Services Practicum III 3 Credits

Provides students with advancing levels of responsibility in direct client services and/or specialized activities/projects while increasing their professional development. Weekly concurrent classroom seminars required. Requires students to complete 125 hours in a field placement agency and the first three sections of their Capstone proposal.

Registration Restrictions: Admission to the Bachelor of Human Services and senior standing

Prerequisites: HUMS A295B with a minimum grade of C and HUMS A420 with a minimum grade of C.

HUMS A496 Human Services Integrative Capstone 3 Credits

Prepares students to conduct applied research to complete a Human Services Integrative Capstone project. Requires 50 hours in the same field placement agency as HUMS A495, where students will collect data necessary for their Capstone research project. Requires students to analyze the data for their Capstone presentation.

Registration Restrictions: Admitted to the Bachelor of Human Services program with senior standing and completion of all GER Tier 1 (basic college-level skills) courses.

Prerequisites: HUMS A495 with a minimum grade of C.

Attributes: UAA Integrative Capstone GER.

Humanities (HUM)

Courses

HUM A211 Introduction to Humanities I 3 Credits

Uses humanities-based methods of inquiry and analysis to interpret art works representative of diverse media, world cultures, and historical eras. Approaches different systems of aesthetic representation through investigations of form, meaning, and values. Places the contributions of individual artists in historical and cultural context.

Registration Restrictions: 3 credits of Fine Arts GER

Prerequisites: WRTG A111.

Attributes: UAA Humanities GER.

HUM A212 Introduction to Humanities II 3 Credits

Uses methods of contemporary humanities-based inquiry to explore major intellectual and aesthetic trends in the world's heritage of arts and ideas. Examines ideas and examples of the arts in the historical and cultural context of their development. Considers how the world's heritage of arts and ideas relates to the aesthetic and intellectual products of a specific world culture or historical era.

Registration Restrictions: 3 credits of Fine Arts GER

Prerequisites: WRTG A211 or WRTG A212 or WRTG A213 or WRTG A214.

Attributes: UAA Humanities GER.

HUM A220 Film as/and Literature 3 Credits

An exploration of what makes good literature and good film, and the relationship between the two genres. Focuses on how literary and cinematic expression differs, and how--or if--the former translates into the latter. Students learn to read novels, plays, and short stories critically and to watch films critically. Two critical essays required; readings are numerous.

Industrial Technology (ITEC)

Courses

ITEC A101 Hazwoper 24 Hour 1.5 Credit

Designed to provide the classroom requirements for students trained at the Hazardous Waste Site worker level as described in 29 CFR 1910.120.

ITEC A103 Hazwoper 40 Hour 2 Credits

Designed to provide classroom requirements of 29 CFR 1910.120 (a) (b-o) for training a hazardous waste site worker.

ITEC A105 Properties of Hazardous Materials 3 Credits

Applies basic concepts of chemistry and physics fundamentals to the characterization and management of chemical hazards. Recognition of dangers in firefighting, storing and handling of hazardous materials is presented. Terminology used to identify hazards in Material Safety Data Sheets (MSDS), labeling and transportation will be developed.

ITEC A111 Millwright Level I 4 Credits

Consists of six modules and the core NCCER curriculum. Provides students with knowledge in basic safety, basic math, hand tools, power tools, blueprints and basic rigging. Provides hands-on and classroom instruction to help students master the skills required in the millwright profession.

Registration Restrictions: At least one high school math class completed at a 10th-grade level, reading and writing at 10th-grade level.

ITEC A112 Millwright Level II 4 Credits

Consists of nine modules of instruction. Provides hands-on and classroom instruction to help students master the skills required for the millwright profession. Classes will be conducted with the cooperation of industry partnership. Skilled millwrights will participate in instruction of modules and the on-the-job training and skill development.

Prerequisites: ITEC A111.

ITEC A123 Safety Laws and Standards 4 Credits

Explores the U.S. Occupational Safety and Health Administration (OSHA) regulations protecting workers from exposure to occupational hazards. Students concentrate on researching, interpreting, summarizing and applying OSHA regulations. Students are introduced to a "proactive" philosophy of company compliance with OSHA regulations, with an emphasis on using eight specific approaches to providing a safe and healthful working environment. Helps students develop and implement a hazard communication program for employees. Learning activities will include interviewing safety professionals, analyzing case studies, writing reports, researching and interpreting OSHA standards in the Code of Federal Regulations, conducting a chemical inventory, interpreting material safety data sheets, and developing a written hazard communication program.

ITEC A125 Confined Space Awareness 0.5 Credits

Designed to give students the training that is required in the federal Confined Space Entry Regulations, 29 CFR 1910.146, for supervisors, attendants and entrants.

ITEC A166 Introduction to Environmental Technology 3 Credits

Designed to introduce the student to the potential hazards and governing regulations of chemicals, to safe practices in the management of hazardous materials and waste, and to essential skills, coupled with the basic knowledge that will help the student who is pursuing a role as an environmental technician or environmental health and safety professional.

ITEC A183 Sustainable Construction Practices 3 Credits

An introductory course focused on describing the concept of environmentally appropriate building design and construction. The actions of workers in the construction industry affect the environment and an understanding of these impacts will assist students in the choices they must make every day. Clarifies the student's effect on a project's carbon footprint and how to reduce it.

ITEC A211 Millwright Level III 5 Credits

Consists of 12 modules of instruction. Provides hands-on and classroom instruction to help students master the skills required for the millwright profession. Classes will be conducted with the cooperation of industry partnership. Skilled millwrights will participate in instruction of modules and on-the-job training and skill development.

Prerequisites: ITEC A111 and ITEC A112.

ITEC A212 Millwright Level IV 5 Credits

Consists of 12 modules of instruction. Provides hands-on and classroom instruction to help students master the skills required for the millwright profession. Conducted with the cooperation of industry partnership. Skilled millwrights will participate in instruction of modules and on-the-job training and skill development.

ITEC A213 Millwright Level V 5 Credits

Consists of nine modules of instruction. Students will perform written and manual proficiency in each module. Provides hands-on and classroom instruction to help students master the skills required for the millwright profession. Classes will be conducted with cooperation of industry partnerships. Skilled millwrights will participate in instruction of modules and on-the-job training and skill development.

ITEC A221 Safety Equipment and Operations 3 Credits

Covers the operation, testing and maintenance of safety equipment, and the implementation of safe operating procedures in a variety of workplace situations.

ITEC A225 Contingency Plans 3 Credits

Designed to teach students the requirements for emergency contingency plans for facilities, vessels and communities. Students will review federal and state regulations and develop an emergency response plan for oil and hazardous substances discharges and releases.

ITEC A227 Process Safety Management 3 Credits

Presents an in-depth overview of the Process Safety Management (PSM) of Highly Hazardous Chemicals regulation (29CFR 1910.119). There will be an increased focus on case histories of industrial accidents and how proper implementation of PSM systems could have prevented catastrophe.

Special Note: Prior safety experience or safety classes are highly recommended, but not required.

ITEC A295 Industrial Technology Internship 6 Credits

Provides students the practical experience needed to apply the NCCER-accredited course sequence to the workplace under the direction of field supervisors.

Special Note: While the college has internship partnerships in place and will make every effort to place students with a sponsoring organization, internship opportunities are not guaranteed; it is ultimately the responsibility of the student to secure an internship.

Interior Design (ID)

Courses

ID A141 Interior Design 3 Credits

Beginning interior design survey course. Design theory as related to planning and decorating homes. Particular emphasis on developing individual styles, color schemes, floor, wall and window coverings, basic lighting, and interior furnishings.

International Studies (INTL)

Courses

INTL A101 Local Places/Global Regions: An Introduction to Geography 3 Credits

Introduction to cultural, political, and environmental diversity in an international context. Focus on key global issues, current events, and geographic approaches to understanding world problems.

Crosslisted With: GEOG A101.

Attributes: UAA Social Sciences GER.

INTL A325 Northeast Asia in 21st Century 3 Credits

An interdisciplinary examination and analysis of Northeast Asia covering China, the Koreas, and Japan designed to provide students with the means to understand how the societies of this region have developed separate and distinct identities despite their common cultural and philosophic roots.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses.

Crosslisted With: HIST A325 and PS A325

Attributes: UAA Integrative Capstone GER.

Japanese (JPN)

Courses

JPN A101 Elementary Japanese I 4 Credits

Introductory course for students with no previous knowledge of the Japanese language. Develops listening, speaking, reading, and writing skills in Japanese for effective communication at the elementary level. Students gain understanding of basic cross-cultural perspectives. Course conducted in Japanese.

Attributes: UAA Humanities GER.

JPN A102 Elementary Japanese II 4 Credits

Continuation of introductory course. Further develops elementary listening, speaking, reading, and writing skills in Japanese for effective communication. Enhances appreciation of cross-cultural perspectives. Course conducted in Japanese.

Prerequisites: JPN A101.

Attributes: UAA Humanities GER.

JPN A201 Intermediate Japanese I 4 Credits

Intermediate course for students with basic knowledge of Japanese. Enhances listening, speaking, reading, and writing skills for effective communication at the intermediate level. Students critically examine diverse cultural perspectives. Course conducted in Japanese.

Prerequisites: JPN A102.

Attributes: UAA Humanities GER.

JPN A202 Intermediate Japanese II 4 Credits

Continuation of first semester in intermediate Japanese. Further develops listening, speaking, reading, and writing proficiency for effective communication and in preparation for advanced study of Japanese. Students interpret diverse cultural perspectives. Course conducted in Japanese.

Prerequisites: JPN A201.

Attributes: UAA Humanities GER.

JPN A290 Selected Topics in Japanese Culture 1 Credit

Topics in Japanese culture such as Shodo (calligraphy), Zen Meditation, Ikebana (flower arrangement), and Chado/Sado (tea ceremony). Gives students opportunities to learn Japanese culture first hand.

Special Note: May be repeated twice for credit, but not more than one credit can be applied to Language major.

Prerequisites: JPN A101.

JPN A301 Advanced Japanese I 4 Credits

Advanced Japanese course in refining listening, speaking, reading, writing and analytical skills for effective interaction in communicatively complex situations. Students critically analyze diverse cultural topics.

Special Note: Course conducted in Japanese.

Registration Restrictions: If prerequisite not met, students can gain entrance to course with departmental approval.

Prerequisites: JPN A202 with a minimum grade of C.

Attributes: UAA Humanities GER.

JPN A302 Advanced Japanese II 4 Credits

Continuation of first semester in advanced Japanese. Further refines listening, speaking, reading, writing and analytical skills for effective interaction in communicatively complex situations. Students critically analyze diverse cultural topics.

Special Note: Course conducted in Japanese.

Registration Restrictions: If prerequisite not met, students can gain entrance to course with departmental approval.

Prerequisites: JPN A301 with a minimum grade of C.

Attributes: UAA Humanities GER.

JPN A350 Business Japanese 3 Credits

Focuses on working knowledge of Japanese business and financial terminology, Japanese business culture, and business practices. Study of business correspondence, terms and jargon, negotiations, and other topics useful in the Japanese business environment.

Special Note: Course conducted in Japanese.

Prerequisites: JPN A202.

JPN A390 Selected Topics: Studies in Japanese Culture and Society 3 Credits

Examines various aspects of Japanese culture and society with critical analysis of textual and cultural artifacts (e.g., historical, political, literary) through a variety of disciplinary methodologies. Enhances Japanese language skills in writing, reading, speaking, listening and cultural literacy. Course conducted in Japanese.

Special Note: Course may be repeated twice for credit with a change in subtitle.

Prerequisites: JPN A301 with a minimum grade of C.

JPN A391 Selected Topics: English-Language Studies in Japanese Culture and Society 3 Credits

An overview of Japanese culture and society on a selected topic, with critical analysis through a variety of disciplinary methodologies (e.g., historical, sociological, political and literary).

Special Note: May be taken twice for credit with change of subtitle.

Prerequisites: (COMM A111 with a minimum grade of C or COMM A235 with a minimum grade of C or COMM A237 with a minimum grade of C or COMM A241 with a minimum grade of C).

JPN A490 Selected Topics: Studies in Japanese Literature and Culture 3 Credits

Focuses on intensive study of authors, literary movements, periods and genres in historical and cultural contexts. Enhances Japanese language skills in reading, listening, writing, speaking, and cross-cultural literacy.

Special Note: May be repeated twice for credit with change of subtitle. Course conducted in Japanese.

Prerequisites: JPN A302 with a minimum grade of C.

Journalism & Public Comm (JPC)

Courses**JPC A201 Reporting and Writing News 3 Credits**

Presents the basic principles of reporting and writing news. Teaches students to identify newsworthy people and events, conduct interviews, gather information and write news reports. Emphasizes writing under deadlines.

Prerequisites: WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C.

JPC A202 First Amendment and Media Ethics 3 Credits

Examines media ethics from its foundations to its modern practice. Emphasizes principles and practices of First Amendment law and media ethics.

Prerequisites: WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C.

JPC A203 Writing and Producing Media 3 Credits

Provides students with the basic principles and best practices for writing and producing for multiple media platforms. Introduces the fundamentals of writing, story structure, and audio and video production. Introduces student portfolio for major.

Prerequisites: JPC A201 with a minimum grade of C.

JPC A204 Media Literacy 3 Credits

Examines how we access, analyze, evaluate and create media in a variety of forms. Explores how media and technology converge in a global culture. Emphasizes critical thinking skills, self-expression and information literacy.

Attributes: UAA Social Sciences GER.

JPC A211 Visual Literacy 3 Credits

Examines visual forms of communication. Emphasis on the use of images in newspapers, magazines, film, television, photography, informational graphics, interactive multimedia, digital games, and Web-based technologies and the role of visual media in cultural processes and aesthetic appreciation.

JPC A212 Editing in a Multimedia World 3 Credits

Focuses on principles and practice in editing copy for print, broadcast, Web and mobile; selecting pictures and video; and writing headlines, cutlines, blurbs, teases and promos. Examines multimedia copy editing concepts and terminology. Emphasizes ethical decision making and language usage.

Prerequisites: JPC A201 with a minimum grade of C.

JPC A213 Digital Imaging 3 Credits

Examines the creation and use of digital images to communicate. Emphasizes visual aesthetics, composition, image layering, photo ethics, spatial relationships, compression techniques, digital painting, editing, color adjustment, filtering, image capture and file formatting.

JPC A312 History of Alaska Media 3 Credits

Examines the history and development of Alaska media. Emphasis on how Alaska communications media have shaped the development of Alaska from "Seward's Folly" through statehood to analysis of coverage of current political and social controversies.

JPC A313 Movies and the First Amendment 3 Credits

Analyzes how First Amendment issues are presented in film and television as popular culture. Emphasis on analysis of First Amendment and media ethics issues as presented in films from "His Girl Friday" (1932), "All the President's Men" (1976), "The Paper" (1996) and other media-related movies.

JPC A314 Documentary Filmmakers and Filmmaking 3 Credits

Analyzes cinematography and filmmaking techniques of significant American and international documentary filmmakers.

Registration Restrictions: Junior status.

JPC A342 Photojournalism 3 Credits

Analyzes newspaper, magazine, and World Wide Web digital photography as news and documentary forms. Emphasis on principles, practices, and professional standards of shooting and editing digital photographs on deadline. Students shoot, edit, and print spot news, sports, features and special essays.

Prerequisites: JPC A204.

JPC A343 Radio News Reporting 3 Credits

Emphasizes the principles and practices of professional audio news reporting, including story research, recording, writing, announcing, sound editing and deadline news production. Students produce and disseminate audio news stories for a variety of broadcast and online markets.

Prerequisites: JPC A204 with a minimum grade of C.

JPC A344 Television News Reporting 3 Credits

Emphasizes the principles and practices of television news reporting, news judgment, ethics, story research, writing, shooting, and editing.

Prerequisites: JPC A203 with a minimum grade of C and JPC A204 with a minimum grade of C.

JPC A345 Web Design 3 Credits

Analyzes the development of the World Wide Web as a communications medium. Emphasis on professional principles and practices of Web design, evolving technologies, and the convergence of digital images, graphics, text, voice, and music to enhance the interactivity between user and the system.

Prerequisites: JPC A213.

JPC A362 Principles of Strategic Communications 3 Credits

Covers how to develop strategic messages in online and traditional media through public relations, integrated marketing and advertising. Emphasis is placed upon how to use ethical strategies and tactics to communicate timely, effective and truthful messages while adhering to sound business principles. Explores how employee, consumer and stakeholder communications have changed with digital communication and social networks.

Prerequisites: JPC A204 with a minimum grade of C.

JPC A363 Research Methods for Strategic Communications 3 Credits

Analyzes research methods for strategic communications. Emphasizes quantitative and qualitative methods, sample selection, questionnaire design, analysis procedures, ethical and legal practices, reporting and presenting results.

Prerequisites: JPC A204 with a minimum grade of C.

JPC A366 Planning and Writing for Strategic Communications 3 Credits

Emphasizes essential elements involved in writing, planning, implementing and evaluating strategic communications. Introduces strategic communications materials in a variety of formats, including fact sheets, news releases, brochures, blogs, position papers, and social media posts.

Prerequisites: JPC A201 with a minimum grade of C and JPC A204 with a minimum grade of C.

JPC A368 Commercial Photography 3 Credits

Analyzes contemporary commercial photography. Emphasis on use of staging, lighting, and photographic techniques for advertising, public relations, and integrated marketing for commercial clients.

Prerequisites: JPC A213 and JPC A342.

JPC A369 Design for Publications 3 Credits

Analyzes contemporary graphics technology for use in strategic communications. Emphasis on writing and visual communication for advertising, public relations, sales promotion and marketing, including design and layout issues related to annual reports and other multiple-page publications.

Prerequisites: JPC A213 and JPC A363.

JPC A382 Digital Audio Production 3 Credits

Emphasizes professional principles and practices of digital audio production including signal processing, multi-track mixing, layering, synchronization and editing. Students produce digital audio programs for various markets.

Prerequisites: JPC A204 with a minimum grade of C.

JPC A383 TV Studio Production 3 Credits

Analyzes television studio production. Emphasis on professional principles and practices of set-up and operation of studio production equipment, production fundamentals, the team process of television program production, and the aesthetics and use of studio television for communication.

Prerequisites: JPC A204.

JPC A384 Digital Video Production 3 Credits

Analyzes digital video production. Emphasis on professional principles and practices of camera, lighting, sound, and editing of digital video for various distribution systems and audiences.

Prerequisites: JPC A343 or JPC A344.

JPC A385 Scriptwriting for Film and Television 3 Credits

Analyzes scriptwriting strategies and techniques for film and television. Emphasis on professional principles and practices of story development, scriptwriting form, storyboarding, and marketing of scripts for film and television projects.

Prerequisites: JPC A204.

JPC A403 Communications and Media Research 3 Credits

Evaluates communications and media research. Emphasizes methods and practices of empirical research in communications and media, including concept framing, empirical methods, data generation, data analysis, peer review, and results presentation and publication. Students develop and produce empirical primary research papers using quantitative and qualitative research methods.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing.

Prerequisites: JPC A204 with a minimum grade of C and (STAT A200 with a minimum grade of C or MATH A121 with a minimum grade of C).

Attributes: UAA Integrative Capstone GER.

JPC A404 Global Media and Communications Systems 3 Credits

Evaluates the history and development of global media and communications systems. Emphasis on the technological, social, political, and economic forces that impact the practice of journalism, public communications, and information technology throughout the world.

Prerequisites: JPC A204.

JPC A413 Communications Law 3 Credits

Legal rights, privileges, and regulations of press, radio, television, Internet and films; libel, contempt, copyright, rights of privacy; decisions of regulatory bodies.

Crosslisted With: JUST A413.

Prerequisites: JUST A110 or JPC A202 with a minimum grade of C.

JPC A442 Multimedia Journalism 3 Credits

Applies ethical principles and professional practices of multimedia journalism, especially regarding the creation of storytelling techniques developed on digital platforms. Examines the emergence of a global information society, with a focus on the effects these phenomena are having on the news media.

Prerequisites: JPC A204 and JPC A345.

JPC A443 Public Service Reporting 3 Credits

Applies advanced professional and ethical practices of newsgathering, reporting, producing and dissemination. Presents the most current multimedia resources and tools for public service and investigative journalism.

Prerequisites: JPC A201 and JPC A203 with a minimum grade of C.

JPC A445 Magazines 3 Credits

Magazine production from concept to writing articles and other content to editing to photography, design and layout and distribution. Class will produce a general interest color magazine.

Prerequisites: JPC A201 and (JPC A211 with a minimum grade of C or JPC A212 with a minimum grade of C or JPC A213 with a minimum grade of C).

JPC A462 Corporate Communications 3 Credits

Focuses on the roles and responsibilities of the corporate communication function with all of the organization's stakeholders. Emphasizes professional principles and practices of strategic communication, internal communication, advertising, public relations, integrated marketing communication, investor relations and new communication technologies in corporations.

Prerequisites: JPC A204 with a minimum grade of C.

JPC A463 Crisis Communications 3 Credits

Evaluates crisis communications. Applies ethical principles and professional practices of crisis communications planning, development, and execution during a crisis. Develops a crisis communications plan for organizations for communicating with internal and external audiences during a crisis.

Prerequisites: JPC A363.

JPC A464 Development Communications 3 Credits

Evaluates development communications. Applies ethical principles and professional practices of planning and execution of development communications programs, including fund-raising for businesses and non-profit organizations.

Prerequisites: JPC A363.

JPC A465 Strategic Communications Campaigns 3 Credits

Applies advanced professional strategic communications practices to a weeks-long campaign from the planning to the execution to the evaluation stages. Applies the ethical use of traditional media, social media and other public engagement forums in influencing audiences.

Prerequisites: JPC A204 with a minimum grade of C.

JPC A482 TV Post-Production 3 Credits

Evaluates television segments and programs in non-studio locations. Applies ethical principles and professional principles and practices of idea development, script writing, storyboarding, planning, use of digital video cameras, lighting, sound, and post-production editing. Students produce commercials, public service spots, and promotional videos for multiple formats and audiences.

Prerequisites: JPC A382 or JPC A383.

JPC A483 Motion Graphics and Animation 3 Credits

Overview of contemporary history and concepts of animation and motion graphics. Application of design principles, techniques and practices of animation production including preproduction, production, and postproduction.

Prerequisites: ART A205 or ART A211 or ART A225 or ART A257 or JPC A382 or JPC A383 or JPC A385 or JPC A482 or JPC A484 or THR A131.

JPC A484 Digital Film Production I 3 Credits

Evaluates history and development of film production. Applies ethical principles and professional principles and practices of digital film production including preproduction, production and postproduction.

Prerequisites: ART A225 with a minimum grade of C or ENGL A382 with a minimum grade of C or JPC A213 with a minimum grade of C or JPC A382 with a minimum grade of C or JPC A383 with a minimum grade of C or JPC A385 with a minimum grade of C or JPC A482 with a minimum grade of C or THR A121 with a minimum grade of C or THR A131 with a minimum grade of C.

JPC A486 Digital Film Production II 3 Credits

Applies ethical principles and professional principles and practices of digital film production including preproduction, production and postproduction, emphasizing revision, expansion and completion of work begun in JPC A484.

Prerequisites: JPC A484 with a minimum grade of C.

JPC A490 Selected Topics in Journalism and Public Communications 3 Credits

Analyze, develop, and apply professional principles and practices to changing landscape of contemporary journalism and media.

Special Note: May be taken twice for credit with a change of subtitle.

Registration Restrictions: Junior or senior standing.

Prerequisites: JPC A204.

JPC A492 JPC Capstone Seminar 3 Credits

Integrates and synthesizes material in other JPC major requirements. Emphasizes the transition from student to emerging professional and considers professional competence, ethical practice, project management, and the synthesis of theory and practice.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior or senior standing

Prerequisites: JPC A204 with a minimum grade of C and (MATH A121 or MATH A151 or STAT A200).

Attributes: UAA Integrative Capstone GER.

JPC A495 JPC Practica and Internships 1-6 Credits

Supervised on-campus and off-campus experience at media organization. JPC practica are supervised media and communications experiences at on-campus media. JPC internships are supervised media and communications experiences at off-campus media. Students perform significant media work under faculty media advisor and on-staff supervision. Students develop portfolios for review.

Special Note: May be repeated for up to 6 credits.

Registration Restrictions: Junior or senior status; 3.00 GPA in JPC courses; permission of JPC media advisor or JPC director of internships.

Prerequisites: JPC A204.

Justice (JUST)

Courses

JUST A110 Introduction to Justice 3 Credits

Survey of philosophies, functions and methods of social control with emphasis on role of law and those involved in its administration--police, courts, and correction organizations. Includes study of history, organization, processes, and problems related to law and justice agencies in a heterogeneous, democratic society.

Special Note: This course is a prerequisite to most Justice courses.

Attributes: UAA Social Sciences GER.

JUST A200 Introduction to Research Methods in Justice 3 Credits

Introduces social science research methods used in justice studies, including explication of the scientific method, experimental and quasi-experimental designs, sampling, data collection methods, and analytical strategies.

JUST A201 Justice Data Analysis 3 Credits

Introduces students to descriptive statistical analysis and presentation of crime and justice data. Topics include measures of central tendency, dispersion, hypothesis testing and statistical significance. Data presentations focus on the production and interpretation of tables and graphs to impact justice policy and practice.

Registration Restrictions: If the prerequisite is not satisfied, an approved UAA placement test score is required.

Prerequisites: MATH A105 with a minimum grade of C or MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or STAT A200 with a minimum grade of C.

JUST A210 Principles of Corrections 3 Credits

Presents an overview of the field of corrections. Topics include theories of punishment and sentencing, history of the prison and jail, inmate prison life, inmate litigation, and the organization of prisons and staff. Issues of gender, race/ethnicity and class are integrated throughout the course.

Prerequisites: JUST A110.

JUST A211 Introduction to Restorative Justice 3 Credits

Introduces the development of community and government responses to crime that encourage healing, accountability, competency, and citizen involvement while holding offenders and communities accountable. Includes theoretical and cultural roots, as well as an overview of restorative justice practices in the U.S. criminal system.

Prerequisites: JUST A110.

JUST A221 Justice Organization and Management 3 Credits

Survey of organization and management of police, court, correctional and legal operations, agency roles, goals, structural arrangements and administrative practices; applicability of theory and research; techniques and instruments of organization and management; and principles of change.

Prerequisites: JUST A110.

JUST A241 Business Law I 3 Credits

Introduction to business law. Covers topics such as the American legal system, dispute resolution, constitutional and government regulation of business, torts, contract laws and theory, international law, and business ethics.

Crosslisted With: BA A241.

JUST A242 Business Law II 3 Credits

Continuation of Business Law I. Covers topics such as sales and leases, negotiables, debtor-creditor relations, agency, business organizations, and property protection.

Crosslisted With: BA A242.

Prerequisites: BA A241 or JUST A241.

JUST A251 Crime and Delinquency 3 Credits

Presents theoretical perspectives on the causes, consequences, and control of crime and delinquency. Surveys the major theoretical perspectives in the study of crime and delinquency with special attention to the application of empirical research methods to important theoretical issues.

Crosslisted With: SOC A251

Attributes: UAA Social Sciences GER.

JUST A255 Criminal Investigation 3 Credits

Introduces fundamentals of investigation. Topics include crime scene search and recording, collection and preservation of physical evidence, and scientific aids. Explores modus operandi, sources of information, interviews and interrogations, follow-up, and case preparation.

Prerequisites: JUST A110.

JUST A310 Introduction to Forensic Science 3 Credits

Provides an overview of forensic science and its relationship within the justice system. Focuses on the various areas of criminalistics, which typically involve the analysis done in government crime labs on physical evidence gathered in the course of a criminal investigation.

Registration Restrictions: Junior or senior standing.

Prerequisites: JUST A110 or LEGL A101.

JUST A315 Development of Law 3 Credits

Examines the philosophy and development of law in the United States from colonial times to the present. Explores American constitutional history and the role of the courts, the legislature and the executive branch in the lawmaking process. Analyzes legal developments as they relate to changing economic, political, social and intellectual trends.

Registration Restrictions: Completion of Written Communication Skills GER for baccalaureate degrees with a minimum grade of D.

Prerequisites: JUST A110 or LEGL A101.

JUST A320 Crime Prevention 3 Credits

Examines primary, secondary, and tertiary crime prevention strategies and concepts. Explores in a multidisciplinary context the legal, moral and ethical considerations and problems of human and environmental manipulation. Emphasizes contemporary approaches to preventing criminal behavior.

Prerequisites: JUST A200 and JUST A201 and (JUST A251 or SOC A251).

JUST A330 Justice and Society 3 Credits

The evolutionary influence of ideology, technology and social interests on the justice system. The dynamic impact of long-term emerging concepts such as 'equality' and 'privacy' will be viewed against the background of requirements of political and economic organization.

Prerequisites: JUST A110.

Attributes: UAA Social Sciences GER.

JUST A332 Environmental Crime Prevention 3 Credits

Examines the theoretical background to opportunity- reducing in environmental crime prevention. Explores the application and implementation of crime prevention through environmental design, defensible space, and problem-oriented policing. Illustrates the practical and policy difficulties of environmental crime prevention through the use of case studies and field work.

Special Note: JUST A320 recommended

Prerequisites: JUST A200 and JUST A201 and (JUST A251 or SOC A251).

JUST A334 Police and Society 3 Credits

Provides a foundation in American policing. Examines the history, social organization, institutional contradictions and contemporary challenges of the police in the United States. Special emphasis given to the use of empirical research methods to advance our understanding of policing.

Prerequisites: JUST A110 and JUST A200 and JUST A201.

JUST A340 Family Law 3 Credits

Studies federal and state statutes and judicial doctrines governing familial relationships. Emphasis on marriage, divorce, child custody, support, property rights, adoption and child protection. The impact of the Indian Child Welfare Act in Alaska family law is explored.

Crosslisted With: LEGL A340.

Prerequisites: JUST A110 or LEGL A101.

JUST A343 Constitutional Law 3 Credits

Introduces students to American constitutional law through a study of the history of the Constitution and selected landmark Supreme Court cases. Topics covered are separation of powers, judicial review, civil rights and liberties, property and economic rights and others.

Crosslisted With: PS A343.

Prerequisites: JUST A110 or PS A101.

JUST A352 Criminal Law and Procedure 3 Credits

Examines elements and functions of substantive criminal law together with constitutional, statutory and rules-based limits on law enforcement in the United States. Includes federal and state law of crimes, defenses, search and seizure, interrogations and confessions, identification, arrests and charging, right to counsel, right to jury, sentencing, and double jeopardy.

Registration Restrictions: LEGL A215 recommended.

Crosslisted With: LEGL A352

Prerequisites: JUST A110 or LEGL A101.

JUST A355 Rural Justice 3 Credits

Investigates rural crime and criminal justice. Examines the specific geographic, social and cultural characteristics of rural communities and how these factors influence the prevalence and nature of crime and criminal justice. Reviews and assesses competing theories of justice. Comparative analysis of rural crime and criminal justice in other countries, with emphasis given to other Circumpolar nations.

Registration Restrictions: Junior or senior standing

Prerequisites: JUST A110.

JUST A356 Organized Crime 3 Credits

Provides a review of the operations, structures, history and theories of organized crime in the United States and internationally. Emphasis is given to the implications of organized crime on the development of criminological theory and the impact organized crime has on the legal and criminal justice system in the United States.

Registration Restrictions: Junior or senior standing

Prerequisites: JUST A110 or LEGL A101.

JUST A360 Justice Theory and Policy Analysis 3 Credits

Critiques the essential theories underlying the operation of the justice system and analyzes contemporary policies within the framework of justice theory and policy. Analyzes the influence of politics and ideology on the operation of the justice system and evaluates the role of social science research evidence in formulating evidence-based justice policy.

Prerequisites: JUST A110 and JUST A200 and JUST A201 and (JUST A251 or SOC A251).

JUST A365 Comparative Justice Systems 3 Credits

Compares and contrasts global justice systems and examines international problems related to crime and justice.

JUST A366 Substance Use and Crime 3 Credits

Introduces the psychopharmacology, physiological effects and schedule classification for substance of abuse. Reviews data estimating extent of use, abuse and related consequences. Provides a critical analysis of the connection between crime and substance use. Differentiates between policy responses to substance use and abuse including prevention, treatment, enforcement and harm reduction.

Registration Restrictions: Junior or senior standing.

Prerequisites: JUST A110.

JUST A371 Cinematic Images of Justice 3 Credits

Visual survey of how the cinema has portrayed the criminal justice system. Special attention devoted to discrepancies between scientific research findings and popular stereotypes portrayed by the media. Attention given to each component of the criminal justice system. Impact of fictionalized events and justice system action/ reaction will be juxtaposed with the reality of the justice system.

Registration Restrictions: Junior or senior standing

Prerequisites: JUST A110.

JUST A374 The Courts 3 Credits

Examines the basic components of the U.S. courts with particular emphasis on case processing through the court system and the roles of court actors. Covers the history as well as the current structure and function of the court system and assesses the gap between the ideals and the realities of court processes and practices.

Registration Restrictions: Junior or Senior standing

Prerequisites: JUST A110 or LEGL A101.

JUST A375 Juvenile Justice and Delinquency 3 Credits

Examines the theory and practice of juvenile justice. Reviews changing conceptions of justice and their impact on policy and legal rights. Explores formal and informal responses to juvenile delinquency, with specific attention to gender, race, and ethnic disparities.

Registration Restrictions: Junior standing and above

Attributes: UAA Social Sciences GER.

JUST A384 Contemporary Corrections 3 Credits

Reviews current theory, research and policy in the field of corrections and evaluates the operation of correctional policies using evidence-based standards of effectiveness. Issues analyzed range from examining contemporary explanations of American punishment policies to evaluating treatment and rehabilitation programs.

Prerequisites: JUST A110 and JUST A200 and JUST A201.

JUST A398 Individual Research 1-6 Credits

Applies substantive and methodological training to a selected justice topic under the direction of a supervising faculty member. Research activities may include, but are not limited to, conducting literature reviews; compiling bibliographies; formulating research hypotheses; developing research designs; collecting, entering and analyzing data; and interpreting findings.

Special Note: May be repeated for maximum of 6 credits.

Registration Restrictions: Faculty permission

Prerequisites: JUST A110 and JUST A200 and JUST A201.

JUST A413 Communications Law 3 Credits

Legal rights, privileges, and regulations of press, radio, television, Internet and films; libel, contempt, copyright, rights of privacy; decisions of regulatory bodies.

Crosslisted With: JPC A413.

Prerequisites: JPC A202 with a minimum grade of C or JUST A110.

JUST A432 Crime Analysis and Mapping 3 Credits

Introduces analytical concepts and computer applications used in the study of temporal and spatial crime data. Demonstrates how these techniques can be used by justice agencies with a special emphasis given to police departments.

Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses and junior or senior standing

Prerequisites: JUST A200 with a minimum grade of C and JUST A201 with a minimum grade of C.

Attributes: UAA Integrative Capstone GER.

JUST A434 Police-Community Relations 3 Credits

Examines police-community relations in the United States. Explores common conceptions of the police role, from the perspective of both the public and the police themselves, and their impact on police-community relations. Particular emphasis is given to recent developments aimed at ameliorating strained relationships between the police and the various communities they serve.

Registration Restrictions: Senior standing or instructor approval

Prerequisites: JUST A110 and JUST A200 and JUST A201.

JUST A443 Civil Liberties 3 Credits

Examines civil liberties in the United States with emphasis on the First Amendment, discrimination, the right to privacy and criminal justice. Focuses on Supreme Court cases and literature and considers various influences on legal analysis and judicial decision-making.

Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses and junior or senior standing

Crosslisted With: LEGL A443

Prerequisites: JUST A315 or JUST A343 or PS A343.

Attributes: UAA Integrative Capstone GER.

JUST A444 Terrorism 3 Credits

Examines contemporary and historical terrorist ideology, organization and tactics including international and domestic groups. Focuses on the balance of prevention, security and liberty.

Registration Restrictions: Junior or senior standing

Prerequisites: JUST A110 and (JUST A251 or SOC A251).

JUST A445 Probation, Parole and Community Corrections 3 Credits

Covers the history and development of probation and parole, including notions of rehabilitation, reentry and reintegration. Investigates evidence-based standards, and numerous and diverse types of supervision, treatment, control, restoration and supportive programs for criminal offenders within the community.

Prerequisites: JUST A110.

JUST A460 Justice in Crisis 3 Credits

Critically examines various perspectives on justice and the ability of a society to maintain the ideal of justice. Compares conditions in different countries and investigates different social and historical conditions when justice was challenged. Analyzes the influence of culture, race/ethnicity and socioeconomic inequality on the operation of the American justice system.

Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses and senior standing

Prerequisites: JUST A110 and JUST A200 and JUST A201 and (JUST A251 or SOC A251).

Attributes: UAA Integrative Capstone GER.

JUST A463 Biobehavioral Criminology 3 Credits

Examines biobehavioral correlates of crime and ways these factors interact with socio-environmental and psychophysiological factors to impact crime. Analyzes historical and contemporary theories and research. Applies interacting factors to explain specific types of violent and non-violent criminal behavior.

Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses and senior standing

Prerequisites: JUST A110 and JUST A200 and JUST A201 and (JUST A251 or SOC A251).

Attributes: UAA Integrative Capstone GER.

JUST A484 Corrections Theory and Policy 3 Credits

Analyzes various issues and problems pertaining to the operation of correctional facilities with an emphasis on theory. Issues investigated include prison health care, inmate health, inmate violence and the practical day-to-day work of correctional staff.

Prerequisites: JUST A110 and JUST A200 and JUST A201.

JUST A485 Tribal Courts and Alaska Native Rights 3 Credits

Explores history and nature of Alaska Natives' legal relationship with state and federal governments, issues of tribal sovereignty in the United States and Alaska Native self-government. Studies the history and impact of the Alaska Native Claims Settlement Act, and the operation of tribal courts in the United States with an emphasis on tribal courts in Alaska.

Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses and junior or senior standing

Crosslisted With: LEGL A485

Prerequisites: JUST A110 or LEGL A101.

Attributes: UAA Integrative Capstone GER.

JUST A488 Research Practicum 1-6 Credits

Explores the application of research skills to the study of a problem in the justice field. May involve field research and related independent study.

Special Note: May be repeated for a maximum of 6 credits.

Registration Restrictions: Faculty permission

Prerequisites: JUST A110 with a minimum grade of B and JUST A200 with a minimum grade of B and JUST A201 with a minimum grade of B.

JUST A490 Contemporary Justice Issues 1-6 Credits

A variable topics course which addresses current issues. Topics of national interest as well as those peculiar to Alaska will be included.

Special Note: May be repeated once for credit with a change in subtitle.

Registration Restrictions: Junior standing.

Prerequisites: JUST A110.

JUST A495 Internship 1-6 Credits

Specially arranged field experiences for advanced justice majors and paralegal certificate students. Designed to expand knowledge and skills through supervised placements in justice, law and governmental settings.

Special Note: May be repeated for a maximum of 6 credits.

Registration Restrictions: Approval by internship coordinator.

JUST A625 Seminar in Criminal Violation 3 Credits

Applies theories of crime causation to specific types of criminal violations in a seminar format. Assesses methods of prevention and potential treatment of the violator. Includes crimes of violence, crimes against the public order, organized crime and white collar crime.

Registration Restrictions: Graduate standing

JUST A630 Justice Administrative Theory and Practice 3 Credits

Synthesizes policy development with theory and research in the administration of justice organizations. Analyzes theories, practices, innovations and administration strategies.

Registration Restrictions: Graduate standing

JUST A640 Corrections Theory and Research 3 Credits

Reviews and assesses the historical development of corrections including the social and economic costs of imprisonment and the research evidence on effectiveness. Examines changes in punishment philosophy, contemporary correctional practice and the emergence of mass incarceration in the late 20th century.

Registration Restrictions: Graduate standing.

Special Note: Offered as Demand Warrants.

JUST A650 Policing Theory and Research 3 Credits

Reviews and assesses prevailing theories of the historical development, social organization and behavior of police. Examines the role of police as a response to public safety and public health problems. Evaluates recent police reforms and the overall effectiveness of public policy efforts that place emphasis on a police response.

Registration Restrictions: Graduate standing.

JUST A670 Administrative Law 3 Credits

Examines legal guidelines for adoption, enforcement, and adjudication of violations of agency regulations at federal, state, and local levels as exercised by public sector management. Analyzes legislative, executive, and judicial controls on agency action. Research project required.

Registration Restrictions: Graduate standing.

Special Note: Offered Spring Semesters.

Legal Nurse Consultant (LNC)

Courses

LNC A347 Legal Nurse Consultant Paralegal Principles and Practices **2 Credits**

Examines regulatory climate governing the work of Legal Nurse Consultant Paralegals and introduces concepts of substantive law and professional skills necessary for success in this field. Practice in Alaska and professional ethics are emphasized. Legal specialty course.

Registration Restrictions: Associate or baccalaureate degree in Nursing from a regionally accredited institution.

Prerequisites: LEGL A101 with a minimum grade of C or concurrent enrollment and LEGL A215 with a minimum grade of C or concurrent enrollment.

LNC A348 Medical Records Review **1 Credit**

Examines the role of medical records in personal injury litigation, malpractice cases, claims review, peer review, and compliance proceedings. Includes obtaining, reviewing, and summarizing records; records confidentiality and records security procedures; use of medical consultants; use of medical records to value and settle a case; working with records at trial; and rules of legal ethics associated with access to medical records. Legal specialty course.

Registration Restrictions: Associate or baccalaureate degree in Nursing from a regionally accredited institution.

Prerequisites: LEGL A101 with a minimum grade of C or concurrent enrollment and LEGL A215 with a minimum grade of C or concurrent enrollment.

Legal Studies (LEGL)

Courses

LEGL A101 Introduction to Law **3 Credits**

Introduces legal processes in a democratic society. Emphasis on legal terminology, federal and state court systems, and judicial decision making. Introduction to basic concepts of contracts, torts, criminal law, family law and administrative law. Includes skills for conducting basic legal analysis.

Attributes: UAA Social Sciences GER.

LEGL A215 Legal Ethics and the Role of the Legal Professional **3 Credits**

Studies legal ethics and the nonlawyer professional's role in a law office, corporate or public interest legal department, or government agency. Explores nature, scope and ethics of legal practice and the relationship of nonlawyer staff to lawyers, clients, the court system and the public. Legal practice in Alaska and the rules governing the unauthorized practice of law are emphasized. Foundational practice skills and principles of legal research and writing are introduced. Emphasizes professional skills development. Legal specialty course.

LEGL A340 Family Law **3 Credits**

Studies federal and state statutes and judicial doctrines governing familial relationships. Emphasis on marriage, divorce, child custody, support, property rights, adoption and child protection. The impact of the Indian Child Welfare Act in Alaska family law is explored.

Crosslisted With: JUST A340

Prerequisites: LEGL A101 or JUST A110.

LEGL A352 Criminal Law and Procedure **3 Credits**

Examines elements and functions of substantive criminal law together with constitutional, statutory and rules-based limits on law enforcement in the United States. Includes federal and state law of crimes, defenses, search and seizure, interrogations and confessions, identification, arrests and charging, right to counsel, right to jury, sentencing, and double jeopardy.

Registration Restrictions: LEGL A215 recommended.

Crosslisted With: JUST A352

Prerequisites: JUST A110 or LEGL A101.

LEGL A356 Legal Research, Analysis, and Writing **3 Credits**

Explores techniques of legal research, analysis and writing. Includes legal citation; researching judicial, statutory, regulatory, and secondary sources; research databases; fact pattern analysis; and technical rules of legal writing. Emphasizes professional skills development. Legal specialty course.

Prerequisites: (LEGL A101 with a minimum grade of C and LEGL A215 with a minimum grade of C) and WRTG A111 with a minimum grade of C and (WRTG A211 with a minimum grade of B or WRTG A212 with a minimum grade of B or WRTG A213 with a minimum grade of B or WRTG A214 with a minimum grade of B or ENGL A311 with a minimum grade of B or ENGL A312 with a minimum grade of B or ENGL A313 with a minimum grade of B or ENGL A414 with a minimum grade of B or ENGL A487 with a minimum grade of B).

LEGL A362 Contracts, Debt and Principles of Ownership **3 Credits**

Examines fundamental principles of contract law, property ownership, debt formation and collection. Includes Uniform Commercial Code and Bankruptcy. Legal ethics, practice in Alaska and development of professional skills are emphasized. Legal specialty course.

Prerequisites: LEGL A101 with a minimum grade of C and LEGL A215 with a minimum grade of C.

LEGL A367 Civil Procedure and Pretrial Practice **3 Credits**

Introduces procedural concepts of civil litigation and pretrial practice. Covers the rules of pleading and process, discovery, and motion practice. Reviews concepts of jurisdiction, venue, parties, statutes of limitation, and res judicata, and the ethical duties of competence and diligence. Emphasizes applied professional skills and practice in Alaska. Legal specialty course.

Prerequisites: LEGL A101 with a minimum grade of C and LEGL A215 with a minimum grade of C.

LEGL A377 Evidence, Investigation, and Discovery **3 Credits**

Examines state and federal rules of evidence; sources and scope of privileges; techniques, ethics, and management of case investigation; and discovery processes and problems. Emphasizes professional skills development, Alaska law, and electronic discovery. Legal specialty course.

Registration Restrictions: Prior completion of LEGL A367 is recommended.

Prerequisites: LEGL A101 with a minimum grade of C and LEGL A215 with a minimum grade of C.

LEGL A380 Torts, Workers' Compensation and Insurance Law 3 Credits

Analyzes nature and function of the law of torts, workers' compensation, and liability insurance in the United States, as well as the role of the nonlawyer legal professional in tort litigation and workers' compensation claims. Includes ethical issues in tort, workers' compensation, and insurance cases. Practice in Alaska and the development of professional skills are emphasized. Legal specialty course.

Registration Restrictions: Completion of LEGL A356 is strongly recommended.

Prerequisites: LEGL A101 with a minimum grade of C and LEGL A215 with a minimum grade of C.

LEGL A385 Health Care Law and Regulatory Compliance 3 Credits

Explores legal issues arising in the delivery of health care services, including the physician-patient relationship and standards of care, individual and institutional liability, patient privacy and medical records security, insurance and Medicare, managed care and access to care, federal and state regulation of health care providers and regulatory compliance, accreditation and licensure, staff privileges, and medical ethics. Practice in Alaska and the development of professional skills are emphasized. Legal specialty course.

Registration Restrictions: Completion of LEGL A356 is recommended.

Prerequisites: LEGL A101 with a minimum grade of C and LEGL A215 with a minimum grade of C.

LEGL A398 Individual Research 1-6 Credits

Explores the application of research skills to a problem in the law. May involve research assistance on a faculty research project or independent study.

Special Note: May be repeated for a maximum of 6 credits. May not repeat or replace material in an existing legal studies course.

Registration Restrictions: Faculty approval

Prerequisites: LEGL A356 with a minimum grade of C.

LEGL A443 Civil Liberties 3 Credits

Examines civil liberties in the United States with emphasis on the First Amendment, discrimination, the right to privacy and criminal justice. Focuses on Supreme Court cases and literature and considers various influences on legal analysis and judicial decision-making.

Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses and junior or senior standing

Crosslisted With: JUST A443

Prerequisites: JUST A315 or JUST A343 or PS A343.

Attributes: UAA Integrative Capstone GER.

LEGL A449 Jurisprudence and Legal Theory 3 Credits

Examines the theoretical bases of contemporary legal systems and judicial decision making. Explores the development of and interaction within major schools of legal theory. Topics covered include classical sources of legal theory, core and alternate approaches to legal theory, judicial decision-making, and theories of rights.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior or senior standing

Prerequisites: JUST A110 with a minimum grade of C or LEGL A101 with a minimum grade of C or PHIL A201 with a minimum grade of C or PS A102 with a minimum grade of C.

Attributes: UAA Integrative Capstone GER.

LEGL A485 Tribal Courts and Alaska Native Rights 3 Credits

Explores history and nature of Alaska Natives' legal relationship with state and federal governments, issues of tribal sovereignty in the United States, and Alaska Native self-government. Studies the history and impact of the Alaska Native Claims Settlement Act, and the operation of tribal courts in the United States with emphasis on tribal courts in Alaska.

Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses and junior or senior standing

Crosslisted With: JUST A485.

Prerequisites: JUST A110 or LEGL A101.

Attributes: UAA Integrative Capstone GER.

LEGL A487 Trial and Advanced Litigation Processes 3 Credits

Addresses advanced litigation processes and trial support. Includes alternative dispute resolution processes, case management systems, pretrial orders, pleadings, exhibit and witness lists, pretrial motions, jury instructions and selection, judgments and orders, and notices of appeal. Practice in Alaska and development of professional skills is emphasized. Legal specialty course.

Registration Restrictions: LEGL A356 is strongly recommended.

Prerequisites: LEGL A101 with a minimum grade of C and LEGL A215 with a minimum grade of C and LEGL A367 with a minimum grade of C and LEGL A377 with a minimum grade of C.

LEGL A489 Legal Studies Senior Seminar 3 Credits

Analyzes advanced legal concepts and the role of the nonlawyer in administrative law, business organizations, contract law, torts and workers' compensation, estate planning and probate, and property law. Emphasizes applied paraprofessional skills in legal research, fact analysis, and drafting legal documents. Legal specialty course.

Registration Restrictions: Junior or senior standing.

Prerequisites: LEGL A101 with a minimum grade of C and LEGL A215 with a minimum grade of C and LEGL A356 with a minimum grade of C and LEGL A367 with a minimum grade of C and LEGL A377 with a minimum grade of C.

LEGL A495 Legal Studies Internship **3-6 Credits**

Specially arranged field experiences for advanced Legal Studies students. Designed to expand knowledge and skills through supervised placements in law-related work settings. Emphasizes professional skills development. Legal specialty course.

Special Note: May be repeated for maximum of 6 credits.

Registration Restrictions: Approval by internship coordinator.

Prerequisites: LEGL A101 with a minimum grade of C and LEGL A215 with a minimum grade of C and LEGL A367 with a minimum grade of C.

Liberal Studies Integrated Cor (LSIC)

Courses

LSIC A231 Truth, Beauty, and Goodness **3 Credits**

Integrated approach to the study of critical and normative thinking, including: standards of truth in logic, mathematics, and science; standards of ethical goodness, and standards for the critical appraisal of art and the beautiful.

Crosslisted With: PHIL A231.

Prerequisites: WRTG A111 or concurrent enrollment.

LSIC A331 Power, Authority, and Governance **3 Credits**

An interdisciplinary examination of the origins, nature, and structures of power, authority, and governance; the nature of sovereignty; and the processes of reform and revolution. Various disciplinary perspectives are employed in three to four major case studies. Examples may include the Russian Revolution, the American Civil War, the French Revolution, Globalization and Democracy, the Taiping Revolt, the Meiji Restoration, the American Civil Rights Movement, and the Alaska Native Sovereignty Movement.

Prerequisites: LSSS A111.

LSIC A332 Science, Technology, and Culture **3 Credits**

Explores the interplay of scientific discovery, technological advancement, and the transformation of human societies. It does so by examining key ethical, social, economic, cultural, and policy issues associated with modern science and technology. A speaking intensive course.

Prerequisites: LSIS A202 and LSSS A111 and (LSIC A231 or PHIL A231).

LSIC A488A Capstone Project I: Design and Research **3 Credits**

The design and initial research phase of a substantial year-long capstone research or creative project. Students will work under the guidance of a faculty or community professional mentor, typically in small groups, to prepare and present a research or creative project proposal and to begin data collection or project implementation.

Registration Restrictions: Completion of 9 credits of Liberal Studies disciplinary concentrations. Completion of GER Tier 1 (basic college-level skills) courses.

Prerequisites: LSIC A331 and LSIC A332.

Attributes: UAA Integrative Capstone GER.

LSIC A488B Capstone Project II: Analysis and Presentation **3 Credits**

The analysis and presentation phase of a substantial year-long capstone research or creative project. Students will continue working under the direction of a faculty or community professional mentor, typically in small groups, to complete and present a research or creative project. Requires bi-weekly colloquia with fellow students, mentors, and instructor, and public presentation of final research or creative project.

Prerequisites: LSIC A488A with a minimum grade of C.

Liberal Studies Integrated Sci (LSIS)

Courses

LSIS A102 Origins: Earth-Solar System-Life **5 Credits**

Origins of earth including its formation, its place in the universe, and the life on this planet. Processes that shape the earth, reasons that earth contains life, and the varieties of past and present forms of life.

Prerequisites: LSIS A101 or concurrent enrollment and MATH A105.

Attributes: UAA Natural Science w/ Lab GER.

LSIS A201 Life on Earth **5 Credits**

Examines the biodiversity of life on earth, in the context of chemistry, cell biology, genetics, physiology, ecology, and evolution. Laboratory sessions are designed to increase the student's understanding of the process of science, hypothesis testing, experimental design, classification, and content knowledge. A writing and speaking intensive course.

Prerequisites: LSIS A102 and MATH A151 or concurrent enrollment.

Attributes: UAA Natural Science w/ Lab GER.

LSIS A202 Concepts and Processes: Natural Sciences **5 Credits**

Fundamental concepts in physics and chemistry. Emphasizes logical connections between quantum mechanical view of matter and major themes of modern chemistry and biochemistry. A writing and speaking intensive course.

Prerequisites: LSIS A201 and MATH A151.

Attributes: UAA Natural Science w/ Lab GER.

Liberal Studies Social Science (LSSS)

Courses

LSSS A111 Cultural Foundations of Human Behavior **3 Credits**

Addresses culture as a concept and phenomenon, including its origins, variety, utility, subtlety and complexity, issues of identity, and cultural aspects of human lives from various social science perspectives.

Attributes: UAA Social Sciences GER.

Library Science (LS)

Courses

LS A101 Introduction to Academic Library Research **1 Credit**

Introduction to academic library research strategies tools and techniques for locating, evaluating and ethically using information.

LS A211 Library Research in the 21st Century **3 Credits**

Covers traditional and electronic library sources, the Internet as a research tool, and the critical and ethical uses of information.

Linguistics (LING)

Courses

LING A101 How Language Works **3 Credits**

Introduces systematic analysis of human language and description of its phonological structure, grammatical structure, distribution, diversity, and historical development.

Attributes: UAA Humanities GER.

LING A201 How English Works **3 Credits**

Explores the descriptive analysis of syntax and related aspects of word-formation. Practices traditional and contemporary methods of syntactic analysis, sentence structure and diagramming.

Logistics (LOG)

Courses

LOG A378 Foundations of Logistics and Supply Chain Management **3 Credits**

Introduction to managerial theory and practice as applied to logistics and supply chain management. Management of procurement, storage and the movement of goods and material are discussed. The concept of total logistics cost is evaluated.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

LOG A379 Transportation Management **3 Credits**

Study of the structure and operating characteristics of the major modes of transportation. Managerial techniques are applied to transportation decision-making. Procurement and choice of for-hire transportation services are discussed within supply chain management.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: LOG A378 with a minimum grade of C.

LOG A415 Purchasing Management **3 Credits**

Study of purchasing activities and cost management techniques. Discusses reverse auctions, contracting, and ethics in purchasing.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: LOG A378 with a minimum grade of C.

LOG A416 International Logistics and Transportation Management **3 Credits**

Study of the logistics activities of international firms. Analyzes international trade and transportation. Issues of international business structures, customs documentation, currency exchange rates, and international marketing are discussed.

Registration Restrictions: College of Business and Public Policy majors must be admitted to the upper-division standing.

Prerequisites: LOG A378 with a minimum grade of C and LOG A379 with a minimum grade of C.

LOG A417 Materials Management **3 Credits**

Study of the management of material flows from the supplier to the end customer; from the raw materials dug out of the ground to retail items purchased by customers. Operation and cost analyses are discussed and applied to materials management.

Registration Restrictions: College of Business and Public Policy majors must be admitted to the upper-division standing.

Prerequisites: LOG A378 with a minimum grade of C.

LOG A495 Internship in Global Logistics and Supply Chain Management **3 Credits**

Work experience in an approved position with supervision and training in various phases of global logistics and/or supply chain management within a business organization.

Registration Restrictions: College of Business and Public Policy majors must be admitted to upper-division standing, GPA of 3.0 in major, GPA of 2.75 overall, and permission of major advisor.

Prerequisites: LOG A378 with a minimum grade of B.

LOG A661 Logistics and Global Supply Chain Management: Applications and Strategy **6 Credits**

Provides an overview of logistics and supply chain management through real-world examples. Explores best practices in: inbound, internal and outbound logistics; the flow of goods, information, finances and communication in global supply chains; and supply chain strategy, with an emphasis on analysis of global supply chains of all sizes.

Registration Restrictions: Admission to the MS GSCM program or instructor approval

LOG A662 Supply Chain Technology and Systems **6 Credits**

Provides an overview of information flows and systems, supply chain planning systems, tools for supply chain execution and facilitation, supply chain technology uses and considerations, and innovations in supply chain management. Also provides an opportunity to observe and participate in real world examples of supply chain technology and systems applications.

Registration Restrictions: Admission to the MS GSCM program or permission of instructor.

LOG A663 The Role of Global Supply Chain Management in International Trade **6 Credits**

Introduces international trade agreements, market entry strategies, regulations and best practices needed for international market entry, global market operations requirements and considerations, options for the global movement of goods, and global strategy considerations. Emphasizes the importance of strategic analysis in international supply chain contexts.

Registration Restrictions: Admission to MS GSCM program or permission of instructor.

LOG A664 Leadership Principles and Management Skills for Global Supply Chain Managers **6 Credits**

Provides a framework for understanding management and leadership, themselves, emotional intelligence, workplace relationships, teams, communication, conflict, difficult people, means of self-management, and managing and leading others in a global supply chain environment. Also provides application tools for managing interpersonal relationships in the supply chain.

Registration Restrictions: Admission to MS GSCM program or permission of instructor.

LOG A665 Quantitative and Financial Performance Metrics for Global Supply Chain Management **6 Credits**

Provides an overview of supply chain performance metrics, intelligent systems, and their roles in supply chain decision making. From a supply chain manager's decision-making perspective. Includes analysis and evaluation of financial statements, cost accounting, multiple factors that impact cost in the supply chain.

Registration Restrictions: Admission to MS GSCM program or permission of instructor.

Logistics Operations (LGOP)

Courses

LGOP A110 Logistics, Information Systems and Customer Service **3 Credits**

Introduces the principles and practices of logistics and supply chain operations and how they are integrated into total supply chain management. Discusses the logic of integration concerning how organizations gain a sustainable competitive advantage by implementing total supply chain management. Outlines the role of information technology. Examines customer service from the perspectives of both the organization and the individual.

LGOP A120 Warehouse and Inventory Control Operations **3 Credits**

An introduction to the fundamentals of warehouse management and inventory control operations and how they fit into logistics and the supply chain. The physical aspects of warehousing, layout, coding, safety, materials handling, inventory, and their implications for an organization are explored.

LGOP A125 Transportation Services **3 Credits**

Introduces transportation regulations and policies. Focuses on the roles and services provided by carriers in the rail, road, sea, air, pipeline, and water industries at the state, national, and global levels.

LGOP A160 Purchasing and Supply Management **3 Credits**

Introduces the role of purchasing and supply management in the success of the organization. Discusses modern purchasing and supply management, through clearly defined policy, procedures and processes. Facilitates organizational success by ensuring the organization gets the services and materials needed from their suppliers.

LGOP A235 Transport Operations Management **3 Credits**

Introduces the role and importance of efficient and effective transportation operations of shippers and carriers. Focuses on costing and pricing, carrier and shipper strategies, and information technology.

Marine Technology (MT)

Courses

MT A101 Boating Safety and Essential Navigation **1 Credit**

Entry-level course that fosters safe operation of boats in compliance with boating laws. Addresses Alaska-specific issues, topics, and the essentials of coastal navigation. Includes pool time relating to cold water safety and survival techniques. Students will receive a certificate from the National Association of Boating Law Administrators (NASBLA).

Special Note: Swimming attire or change of clothing is needed.

Encouraged to bring Personal Floatation Device and immersion suit.

MT A231 Vessel Commercial License Preparation **3 Credits**

Preparation for passing the USCG license exam for motor boat operator of uninspected passenger vessels, and master, inland and near coastal. Kenai Peninsula College

Mathematics (MATH)

Courses

MATH A054 Prealgebra **3 Credits**

Topics include operations and applications of whole numbers, integers, fractions, decimals, ratios and proportions, percents, geometry and measures, evaluation of algebraic expressions and applications.

Special Note: MATH A054A, MATH A054B, MATH A054C combined are equivalent to MATH A054.

Registration Restrictions: An approved UAA placement test is required.

Prerequisites: ALEKS Overall Test 1 with a score of 0 or ALEKS Overall Test 2 with a score of 0 or ALEKS Overall Test 3 with a score of 0 or ALEKS Overall Test 4 with a score of 0 or ALEKS Overall Test 5 with a score of 0.

MATH A054A Prealgebra A **1 Credit**

Topics include operations and applications of whole numbers, integers, fractions, decimals, ratios and proportions, and percents. The topic of math anxiety is dealt with throughout the course.

Special Note: MATH A054A, MATH A054B, MATH A054C combined are equivalent to MATH A054.

Registration Restrictions: An approved UAA placement test is required.

MATH A054B Prealgebra B **1 Credit**

Topics include operations and applications of integers, fractions, decimals, ratios and proportions, percents, exponents and radicals.

Special Note: MATH A054A, MATH A054B, MATH A054C combined are equivalent to MATH A054.

Registration Restrictions: If the prerequisite is not satisfied, an approved UAA placement test is required.

Prerequisites: MATH A054A with a minimum grade of C.

MATH A054C Prealgebra C **1 Credit**

Topics include evaluation of algebraic expressions with applications, geometry and measures.

Special Note: MATH A054A, MATH A054B, MATH A054C combined are equivalent to MATH A054.

Registration Restrictions: If the prerequisite is not satisfied, an approved UAA placement test is required.

Prerequisites: MATH A054B with a minimum grade of C.

MATH A055 Elementary Algebra 3 Credits

Topics include evaluating and simplifying algebraic expressions, polynomials, factoring, integer exponents, rational expressions, solutions of linear equations and inequalities, quadratic equations and graphs of lines.

Registration Restrictions: If the prerequisite is not satisfied, an approved UAA placement test is required.

Prerequisites: MATH A054 with a minimum grade of C or ALEKS Overall Test 1 with a score of 017 or ALEKS Overall Test 2 with a score of 017 or ALEKS Overall Test 3 with a score of 017 or ALEKS Overall Test 4 with a score of 017 or ALEKS Overall Test 5 with a score of 017.

MATH A055A Elementary Algebra A 1 Credit

Topics include solutions of linear equations and graphs of lines.

Special Note: MATH A055A, MATH A055B, MATH A055C combined are equivalent to MATH A055.

Registration Restrictions: If the prerequisite is not satisfied, an approved UAA placement test is required.

Prerequisites: MATH A054A with a minimum grade of C.

MATH A055B Elementary Algebra B 1 Credit

Topics include evaluating and simplifying algebraic expressions, polynomials, factoring, and integer exponents.

Special Note: MATH A055A, MATH A055B, MATH A055C combined are equivalent to MATH A055.

Registration Restrictions: If the prerequisite is not satisfied, an approved UAA placement test is required.

Prerequisites: MATH A055A with a minimum grade of C.

MATH A055C Elementary Algebra C 1 Credit

Topics include evaluating and simplifying algebraic expressions, factoring, and quadratic equations.

Special Note: MATH A055A, MATH A055B, MATH A055C combined are equivalent to MATH A055.

Registration Restrictions: If the prerequisite is not satisfied, an approved UAA placement test is required.

Prerequisites: MATH A055B with a minimum grade of C.

MATH A060 Essential Mathematics 4 Credits

Teaches the concepts of basic arithmetic and introductory algebra. Includes operations and properties on real numbers, ratio, proportion, percent, scientific notation and variation, topics from consumer mathematics, evaluation of literal expressions, solution and graphs of linear equations and inequalities; radicals and exponents, polynomials, factoring and special products, fundamental operations with algebraic fractions, solution of quadratic equations, and elementary systems of equations. Geometric formulae are presented on a case-by-case basis as needed.

Special Note: Equivalent to MATH A054 and MATH A055. Credit will not be given for both MATH A055 and MATH A060. Placement test not required.

Prerequisites: ALEKS Overall Test 1 with a score of 0 or ALEKS Overall Test 2 with a score of 0 or ALEKS Overall Test 3 with a score of 0 or ALEKS Overall Test 4 with a score of 0 or ALEKS Overall Test 5 with a score of 0.

MATH A104 Technical Mathematics 3 Credits

Covers proportions and rational equations, applications of percentages, measurement conversions, area and volume calculations, logarithms, and trigonometry. Applications emphasize the relationship of these mathematical concepts to quantitative decision making in technical fields.

Special Note: Does not fulfill the prerequisite for any other mathematics course.

Prerequisites: MATH A055 with a minimum grade of C or MATH A060 with a minimum grade of C or ALEKS Overall Test 1 with a score of 030 or ALEKS Overall Test 2 with a score of 030 or ALEKS Overall Test 3 with a score of 030 or ALEKS Overall Test 4 with a score of 030 or ALEKS Overall Test 5 with a score of 030.

Attributes: UAA Quantitative Skills GER.

MATH A105 Intermediate Algebra 3 Credits

Topics include expressions, equations and applications involving linear, quadratic, rational and radical functions; graphs of linear and quadratic functions; functions and their inverses; introduction to exponential and logarithmic functions; and systems of linear equations.

Prerequisites: MATH A055 with a minimum grade of C or MATH A060 with a minimum grade of C or ALEKS Overall Test 1 with a score of 030 or ALEKS Overall Test 2 with a score of 030 or ALEKS Overall Test 3 with a score of 030 or ALEKS Overall Test 4 with a score of 030 or ALEKS Overall Test 5 with a score of 030.

MATH A115 Art of Mathematics 3 Credits

Presents practical mathematics people use, beautiful mathematics people see, and abstract mathematics people dream. Enables students to describe and analyze the world around them.

Special Note: Does not fulfill the prerequisite for any other mathematics course.

Registration Restrictions: Placement into MATH A105 or higher and WRTG A111 or higher

Prerequisites: ALEKS Overall Test 1 with a score of 030 or ALEKS Overall Test 2 with a score of 030 or ALEKS Overall Test 3 with a score of 030 or ALEKS Overall Test 4 with a score of 030 or ALEKS Overall Test 5 with a score of 030.

Attributes: UAA Quantitative Skills GER.

MATH A121 College Algebra for Managerial and Social Sciences 3 Credits

Emphasizes quantitative decision making in the managerial and social sciences. Covers linear and quadratic equations and inequalities, algebra of matrices, introductory linear programming, exponential and logarithmic functions.

Prerequisites: MATH A105 with a minimum grade of C or ALEKS Overall Test 1 with a score of 055 or ALEKS Overall Test 2 with a score of 055 or ALEKS Overall Test 3 with a score of 055 or ALEKS Overall Test 4 with a score of 055 or ALEKS Overall Test 5 with a score of 055.

Attributes: UAA Quantitative Skills GER.

MATH A151 College Algebra for Calculus 4 Credits

Study of algebraic, logarithmic and exponential functions; systems of equations; and applications.

Special Note: A student may apply no more than 7 credits from any combination of MATH A151, MATH A152 and MATH A155 toward the graduation requirements for any baccalaureate degree.

Registration Restrictions: If the prerequisite is not satisfied, an approved UAA placement test is required.

Prerequisites: MATH A105 with a minimum grade of C or ALEKS Overall Test 1 with a score of 055 or ALEKS Overall Test 2 with a score of 055 or ALEKS Overall Test 3 with a score of 055 or ALEKS Overall Test 4 with a score of 055 or ALEKS Overall Test 5 with a score of 055.

Attributes: UAA Quantitative Skills GER.

MATH A152 Trigonometry 3 Credits

A study of trigonometric functions, including graphing, identities, inverse trigonometric functions, solving equations and polar coordinates, and applications.

Special Note: A student may apply no more than 7 credits from any combination of MATH A151, MATH A152 and MATH A155 toward the graduation requirements for any baccalaureate degree.

Registration Restrictions: If the prerequisite is not satisfied, an approved UAA placement test is required.

Prerequisites: MATH A151 with a minimum grade of C or ALEKS Overall Test 1 with a score of 065 or ALEKS Overall Test 2 with a score of 065 or ALEKS Overall Test 3 with a score of 065 or ALEKS Overall Test 4 with a score of 065 or ALEKS Overall Test 5 with a score of 065.

Attributes: UAA Quantitative Skills GER.

MATH A155 Precalculus 5 Credits

Covers algebra and trigonometry required for calculus. Includes polynomial, rational, exponential, logarithmic and trigonometric functions, and trigonometric identities.

Special Note: A student may apply no more than 7 credits from any combination of MATH A151, MATH A152 and MATH A155 toward the graduation requirements for any baccalaureate degree.

Registration Restrictions: If the prerequisite is not satisfied, an approved UAA placement test is required.

Prerequisites: MATH A105 with a minimum grade of B or ALEKS Overall Test 1 with a score of 055 or ALEKS Overall Test 2 with a score of 055 or ALEKS Overall Test 3 with a score of 055 or ALEKS Overall Test 4 with a score of 055 or ALEKS Overall Test 5 with a score of 055.

Attributes: UAA Quantitative Skills GER.

MATH A211 Mathematics for Elementary School Teachers I 3 Credits

Studies elementary set theory, numeration systems, algorithms of arithmetic, elementary number theory, integers, rational numbers and problem-solving strategies.

Special Note: MATH A211 and MATH A212 with a minimum grade of C are required to meet State of Alaska teacher certification standards.

Prerequisites: MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or STAT A200 with a minimum grade of C.

MATH A212 Mathematics for Elementary School Teachers II 3 Credits

Studies functions, informal geometry, measurement, statistics and probability.

Special Note: MATH A211 and MATH A212 with a minimum grade of C are required to meet State of Alaska teacher certification standards.

Prerequisites: MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or STAT A200 with a minimum grade of C.

MATH A221 Applied Calculus for Managerial and Social Sciences 3 Credits

Covers functions and graphs, differentiation, exponential and logarithmic functions, antidifferentiation and integration, and functions of several variables. Applies these mathematical concepts.

Prerequisites: MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or ALEKS Overall Test 1 with a score of 078 or ALEKS Overall Test 2 with a score of 078 or ALEKS Overall Test 3 with a score of 078 or ALEKS Overall Test 4 with a score of 078 or ALEKS Overall Test 5 with a score of 078.

Attributes: UAA Quantitative Skills GER.

MATH A251 Calculus I 4 Credits

A first course in single-variable calculus. Topics include limits; continuity and differentiation of functions; applications of the derivative to graphing, optimization and rates of change; definite and indefinite integration; and the fundamental theorem of calculus.

Registration Restrictions: If the prerequisite is not satisfied, an approved UAA placement test is required.

Prerequisites: (MATH A151 with a minimum grade of C and MATH A152 with a minimum grade of C) or MATH A155 with a minimum grade of C or ALEKS Overall Test 1 with a score of 078 or ALEKS Overall Test 2 with a score of 078 or ALEKS Overall Test 3 with a score of 078 or ALEKS Overall Test 4 with a score of 078 or ALEKS Overall Test 5 with a score of 078.

Attributes: UAA Quantitative Skills GER.

MATH A252 Calculus II 4 Credits

Further topics in single-variable calculus, including techniques of integration, applications of integration, convergence of sequences and series, parameterized curves, and polar coordinates.

Registration Restrictions: If the prerequisite is not satisfied, an approved UAA placement test is required.

Prerequisites: MATH A251 with a minimum grade of C.

Attributes: UAA Quantitative Skills GER.

MATH A253 Calculus III 4 Credits

Multivariable calculus. Topics include vectors in two and three dimensions; differential calculus of functions of several variables; multiple integration; vector calculus, including Green's and Stokes' theorem; and applications.

Registration Restrictions: If the prerequisite is not satisfied, an approved UAA placement test is required.

Prerequisites: MATH A252 with a minimum grade of C.

Attributes: UAA Quantitative Skills GER.

MATH A261 Introduction to Discrete Mathematics 3 Credits

Introduces concepts of discrete mathematics including relations and graph theory along with prerequisite topics including sets, logic and mathematical proof.

Registration Restrictions: If the prerequisite is not satisfied, an approved UAA placement test is required.

Prerequisites: MATH A151 with a minimum grade of C or MATH A251 with a minimum grade of C.

MATH A264 Introduction to the Mathematics Major 1 Credit

Introduces the major topical areas of mathematics, tools and research methods of mathematicians, and potential career paths in mathematics. Required eportfolio is begun in this course. Opportunities for undergraduates will be presented.

Prerequisites: MATH A251 with a minimum grade of C or concurrent enrollment or MATH A221 with a minimum grade of C or MATH A261 with a minimum grade of C.

MATH A265 Fundamentals of Mathematics 3 Credits

Studies logic, sets, relations, functions and cardinality. Introduces mathematical proof techniques.

Prerequisites: MATH A252 with a minimum grade of C.

MATH A302 Ordinary Differential Equations 3 Credits

Nature and origin of differential equations; analysis of first order, linear scalar, and systems of differential equations using exact, qualitative and geometric methods; forcing and resonance; Laplace transform; and applications.

Prerequisites: MATH A253 with a minimum grade of C.

MATH A303 Introduction to Abstract Algebra 3 Credits

Introduces groups, rings and fields.

Prerequisites: MATH A253 with a minimum grade of C and MATH A265 with a minimum grade of C.

MATH A305 Introduction to Geometries 3 Credits

Introduces Euclidean and non-Euclidean plane geometry and topics selected from affine geometry and projective geometry.

Prerequisites: MATH A253 with a minimum grade of C and MATH A265 with a minimum grade of C.

MATH A306 Discrete Methods 3 Credits

Introduces enumeration and graph theory with some algorithms.

Prerequisites: MATH A251 with a minimum grade of C and (MATH A261 with a minimum grade of C or MATH A265 with a minimum grade of C).

MATH A309 Introduction to Number Theory 3 Credits

Examines fundamental concepts of number theory including primes, divisibility, congruences, quadratic reciprocity, number theoretic functions, continued fractions and Diophantine equations.

Prerequisites: MATH A265 with a minimum grade of C.

MATH A314 Linear Algebra 3 Credits

Studies linear equations, matrices, determinants, finite dimensional vector spaces, linear transformations, characteristic values and inner product spaces.

Prerequisites: MATH A252 with a minimum grade of C.

MATH A321 Analysis of Several Variables 3 Credits

Vector calculus, exterior calculus, optimization techniques, and integration with applications. Emphasizes the use of linear and multilinear algebra techniques to generalize the basic methods of calculus to several independent and dependent variables.

Prerequisites: MATH A253 and MATH A314.

MATH A324 Introduction to Real Analysis 3 Credits

Investigates the limit concept with special reference to functions on the real line. Topics include continuous functions and their properties, sequences and series, and differentiation and integration of functions.

Prerequisites: MATH A253 with a minimum grade of C and MATH A265 with a minimum grade of C.

MATH A371 Stochastic Processes 3 Credits

Theory and applications, including moment generating functions, conditional expectation, Poisson processes, Markov chains, and topics selected from branching processes, queuing theory, random walks, and reliability theory.

Prerequisites: MATH A252 and STAT A307.

MATH A407 Mathematical Statistics I 3 Credits

Topics include random variables, distribution functions, expectation and moment generating function, special parametric families of univariate distributions, joint and conditional distributions, stochastic independence, conditional expectation, distributions of functions of random variables, convergence concepts, and parametric estimation by maximum likelihood.

Prerequisites: MATH A253 and STAT A307.

MATH A410 Introduction to Complex Analysis 3 Credits

Explores analytic functions, Cauchy's theorem, sequences and series, integration, and residues.

Prerequisites: MATH A253 with a minimum grade of C and MATH A265 with a minimum grade of C.

MATH A420 Historical Mathematics 3 Credits

Presents the historical development of mathematical concepts in algebra, trigonometry, geometry, discrete mathematics, calculus, probability and statistics. Presents factors that influenced the growth of mathematical knowledge across cultures and times.

Registration Restrictions: Completion of Written Communication Skills and Oral Communication Skills GER requirements and junior or senior standing.

Prerequisites: MATH A252 with a minimum grade of C and (MATH A261 with a minimum grade of C or MATH A265 with a minimum grade of C).

Attributes: UAA Integrative Capstone GER.

MATH A422 Partial Differential Equations 3 Credits

Presents analysis and solution of partial differential equations. Students will classify and solve initial and boundary value problems for elliptic, hyperbolic and parabolic types. Faculty will select additional topics.

Prerequisites: MATH A302 with a minimum grade of C.

MATH A423 Advanced Engineering Mathematics 3 Credits

A practical review of mathematics for engineers. Includes partial differential equations, vector and matrix analysis, Fourier analysis, and complex analysis.

Special Note: Course does not satisfy mathematics major requirements.

Prerequisites: MATH A302.

MATH A424 Advanced Engineering Mathematics: Linear and Numerical Analysis 3 Credits

Emphasizes mathematics used in engineering. Includes applications of matrices, vector spaces, inner products, and linear transformations; numerical interpolation, approximation, differentiation, and quadrature; finite difference methods for ordinary and partial differential equations; and numerical stability.

Registration Restrictions: Completion of a programming course with a minimum grade of C

Prerequisites: MATH A302 with a minimum grade of C and PHYS A211 with a minimum grade of C.

MATH A425 Advanced Engineering Mathematics: Partial Differential Equations and Complex Variables 3 Credits

Emphasizes mathematics used in engineering. Includes Fourier series and transforms, Bessel functions, Legendre polynomials, linear partial differential equations, and complex variables. Develops the wave, heat and potential equations via first principles. Introduces the method of characteristics as applied to shock phenomena.

Registration Restrictions: Completion of a programming course with a minimum grade of C

Prerequisites: MATH A302 with a minimum grade of C and PHYS A211 with a minimum grade of C.

MATH A426 Numerical Analysis 3 Credits

Introduces numerical solutions of linear systems and eigenvalue problems, nonlinear equations and systems, numerical differentiation and integration, and numerical solutions of ordinary and partial differential equations. Introduces approximation theory, homotopy, and error and stability analysis. Provides theoretical framework for convergence analysis.

Registration Restrictions: Completion of a programming course with a minimum grade of C.

Prerequisites: MATH A252 with a minimum grade of C.

MATH A430 Concepts of Topology 3 Credits

Covers axiomatic definition of a topological space, mappings between topological spaces, continuity, homeomorphism, connectivity, completeness and compactness. Also covers examples and applications from analysis and geometry. May include homotopy (the fundamental group with low-dimensional applications) and/or knot theory.

Prerequisites: MATH A324 with a minimum grade of C.

MATH A431 Introduction to Differential Geometry 3 Credits

Develops the theory of curves and surfaces in Euclidean spaces. Presents major constructions and theorems including the Frenet-Serret apparatus, geodesics, Gauss's Theorema Egregium and the Gauss-Bonnet theorem. Introduces abstract manifolds.

Prerequisites: MATH A265 with a minimum grade of C and MATH A314 with a minimum grade of C.

MATH A490 Selected Topics in Mathematics 1-3 Credits

Presents advanced topics in mathematics selected as continuations of, or complements to, the content of upper-division undergraduate mathematics courses. Emphasizes theoretical developments.

Special Note: Depending on topic selected, use of symbolic computation software may be required. May be repeated once for credit with a change in subtitle.

Registration Restrictions: Instructor permission required.

Prerequisites: MATH A265 with a minimum grade of C.

MATH A495A Mathematics Practicum 1-3 Credits

Provides upper-division mathematics majors the experience of teaching mathematics. The student is responsible for 3 hours per week per credit in the mathematics laboratory or classroom.

Special Note: May be repeated up to a maximum of 3 credits.

Registration Restrictions: Faculty permission required.

Prerequisites: MATH A253 with a minimum grade of C.

MATH A495B Mathematics or Statistics Internship 1-3 Credits

Provides an opportunity to gain experience in the mathematical or statistics field. The position must be approved by a faculty member. Positions will be limited and competitive.

Registration Restrictions: At least two upper-division mathematics or statistics courses that count toward the major.

Prerequisites: MATH A265 with a minimum grade of C.

MATH A496 Advanced Readings in Mathematics 1-3 Credits

Students, by mutual agreement with involved faculty, engage in reading, discussion and presentation of advanced mathematical topics.

Registration Restrictions: At least one upper-division mathematics or statistics course that counts toward the major.

Prerequisites: MATH A265 with a minimum grade of C.

MATH A498 Individual Research 1-3 Credits

Independent research projects under the supervision of a faculty member. The result will be a paper or presentation prepared to publication standards.

Special Note: May be repeated up to a maximum of 6 credits.

Registration Restrictions: Minimum of 6 credits of upper division mathematics courses with a minimum grade of B and faculty permission.

Mechanical Engineering (ME)

Courses

ME A280 Solid Modeling for Engineers 3 Credits

Introduces the use of solid modeling in engineering. Covers the process of creating solid parts, assemblies and fabrication-ready drawings in addition to kinematics linkages. Rapid prototyping technologies such as three-dimensional printing will be used as laboratory exercises.

Prerequisites: ENGR A105A with a minimum grade of C and ENGR A105B with a minimum grade of C.

ME A306 Dynamics of Systems 3 Credits

Modeling of mechanical, electrical, fluid and thermal elements and systems. Study of free and forced response by the Laplace transform, transfer function and state space models. Time domain and frequency domain responses. Coupled systems, system analogy, sensing and actuation principles.

Crosslisted With: EE A306

Prerequisites: (EE A203 with a minimum grade of C or ES A309 with a minimum grade of C) and ES A210 with a minimum grade of C and MATH A302 with a minimum grade of C.

ME A308 Instrumentation and Measurement 3 Credits

Principles of measurement, instrumentation, Laplace transform, Fourier series, transfer function, steady-state response, calibration, and errors. Signal filtering and amplification, data acquisition, recording, and processing. Methods and devices for measuring strain, force, torque, displacement, velocity, acceleration, pressure, fluid flow properties, and temperature.

Crosslisted With: EE A308.

Prerequisites: MATH A302 with a minimum grade of C and (EE A306 with a minimum grade of C or ME A306 with a minimum grade of C or EE A353 with a minimum grade of C).

ME A313 Mechanical Engineering Thermodynamics 3 Credits

Continuation of ES A346 (or ES F346), with topics that include power and refrigeration cycles (Rankine, Brayton, Otto, and Diesel), compressible flow (isentropic, shock waves, and flow in ducts with friction), combustion, and gas vapor mixtures.

Prerequisites: ES A346 with a minimum grade of C.

ME A334 Materials Science 3 Credits

Study and investigate the processing, structures, properties and performance of materials including metals, ceramics, polymers, and composites. Materials design and selection for engineering applications.

Prerequisites: CHEM A106 with a minimum grade of C and ME A334L with a minimum grade of C or concurrent enrollment and PHYS A212 with a minimum grade of C.

ME A334L Materials Science Laboratory 1 Credit

Provides laboratory instruction and experience in the structures, processing, properties, and performance of materials.

Prerequisites: ME A334 with a minimum grade of C or concurrent enrollment and WRTG A212 with a minimum grade of C.

ME A403 Machine Design 3 Credits

Design and analysis of machines by analytical, experimental and computer methods. Identification of requirements and conceptual design of mechanical systems, detailed design of components considering strength, life, reliability and cost.

Prerequisites: ES A261 with a minimum grade of C and ES A331 with a minimum grade of C and MATH A302 with a minimum grade of C and ME A280 with a minimum grade of C.

ME A408 Mechanical Vibrations 3 Credits

Modeling of vibratory mechanical systems with single and multiple degrees of freedom. Study of free and forced vibrations with or without damping by lumped-parameter methods and finite element analysis. Vibrations of rotor systems and vibration monitoring.

Special Note: Not available for credit to students who have completed ME A608.

May Be Stacked With: ME A608

Prerequisites: (EE A306 with a minimum grade of C or ME A306 with a minimum grade of C) and ES A331 with a minimum grade of C.

ME A414 Thermal System Design 3 Credits

Introduces the design of power and space conditioning systems, energy conversion, heating, ventilating, air conditioning, refrigeration (HVAC&R), and steady-state simulation of thermal systems.

Prerequisites: ES A341 with a minimum grade of C and ES A346 with a minimum grade of C.

ME A414L Thermal System Design Lab 1 Credit

Provides supplemental explanation and practical exercises applying thermal system design and heating, ventilation and air conditioning (HVAC) concepts including refrigeration systems, psychrometric applications, air handling unit designs, pipe and pump designs, and fan and air distribution designs.

Prerequisites: ES A341 with a minimum grade of C and ES A346 with a minimum grade of C and ME A414 with a minimum grade of C or concurrent enrollment.

ME A415 Composite Materials 3 Credits

This course presents the mechanics and manufacturing of composite materials and their applications. The analysis, design, processing/fabrication, repair, and evaluation of composite materials and structures are considered.

Special Note: Not available for credit to students who have completed ME A615.

May Be Stacked With: ME A615

Prerequisites: ES A331 with a minimum grade of C and ME A280 with a minimum grade of C and ME A403 with a minimum grade of C.

ME A420 Automotive Engineering 3 Credits

Introduces the design and manufacturability of automotive systems including the vehicle powerplant, drivetrain, suspension and frame.

Registration Restrictions: Admission to the Bachelor of Science in Mechanical Engineering

Prerequisites: (EE A306 with a minimum grade of C or ME A306 with a minimum grade of C) and ES A331 with a minimum grade of C and ME A280 with a minimum grade of C.

ME A421 Engineering Finite Element Analysis 3 Credits

Covers the mathematical formulation of the finite element analysis (FEA) method; elemental matrices, nodal loads, assembly, and solution of finite element problems; static, modal, and dynamic solid-mechanics FEA problems; heat transfer, fluid mechanics, and electromagnetic FEA problems; and FEA software: preprocessing, processing, and postprocessing.

Special Note: Not available for credit to students who have completed ME A621. Recommended for students to take MATH A314.

May Be Stacked With: ME A621

Prerequisites: ES A210 with a minimum grade of C and ES A331 with a minimum grade of C and ES A341 with a minimum grade of C and ES A346 with a minimum grade of C.

ME A438 Design of Mechanical Engineering Systems 3 Credits

Capstone course in which mechanical engineering students design a mechanical engineering component or system starting with the initial design specification to the implementation and testing. Students apply knowledge and skills learned in their undergraduate curriculum.

Registration Restrictions: Student must be in senior year of BSME degree program or obtain faculty permission. Completion of GER Tier 1 (basic college-level skills) courses.

Prerequisites: ME A403 with a minimum grade of C or concurrent enrollment.

Attributes: UAA Integrative Capstone GER.

ME A441 Heat and Mass Transfer 3 Credits

Application of heat and mass transfer concepts to engineering problems including steady state and transient conduction, numerical analysis of heat transfer problems, laminar and turbulent free and forced convection, and black body and real surface radiation.

Prerequisites: ES A341 with a minimum grade of C and ES A346 with a minimum grade of C and MATH A302 with a minimum grade of C.

ME A441L Heat and Mass Transfer Lab 1 Credit

Provides supplemental explanation and practical exercises applying heat and mass transfer concepts to engineering problems including steady state and transient conduction, numerical analysis of heat transfer problems, laminar and turbulent free and forced convection, and black body and real surface radiation.

Prerequisites: ME A441 with a minimum grade of C or concurrent enrollment.

ME A442 Advanced Fluid Mechanics 3 Credits

Covers advanced topics in fluid mechanics, including derivation of flow equations, ideal fluid flows, incompressible viscous flows and compressible inviscid flows.

Special Note: Not available for credit to students who have completed ME A642.

May Be Stacked With: ME A642

Prerequisites: ES A341 with a minimum grade of C and MATH A302 with a minimum grade of C.

ME A451 Aerodynamics 3 Credits

Covers fundamentals of aerodynamics including boundary layer theories, aerodynamics of lifting flow over airfoils, wings of finite span and airfoil theory in subsonic, transonic, and supersonic flows.

Special Note: Not available for credit to students who have completed ME A651.

May Be Stacked With: ME A651

Prerequisites: MATH A302 with a minimum grade of C and ES A341 with a minimum grade of C and ME A313 with a minimum grade of C.

ME A453 Renewable Energy Systems Engineering 3 Credits

The study and design of renewable energy systems from a technical engineering standpoint. Solar, hydrokinetic, conventional hydroelectric, wind, geothermal, and biological energy systems will be examined. Additional topics include feasibility analysis and energy storage techniques.

Special Note: Not available for credit to students who have completed ME A653.

May Be Stacked With: ME A653

Prerequisites: ES A341 with a minimum grade of C and ES A346 with a minimum grade of C.

ME A454 Manufacturing Design 3 Credits

Advanced course that focuses over 3-D applied engineering applications and design. Part design for machining, molding, casting, and sheet metal operations. Methods for applied design for manufacturing and assembly are introduced. Pro/Engineer 3-D part, composite, sheet metal and assembly modules are used to practice a variety of engineering design applications.

Prerequisites: ENGR A151 with a minimum grade of C and ES A261 with a minimum grade of C and ME A280 with a minimum grade of C.

ME A455 HVAC Systems Optimization 3 Credits

Design of thermal and heating, ventilation, and air-conditioning (HVAC) systems with emphasis on economic considerations and optimization. Concepts of thermodynamics, fluid mechanics and heat transfer will be integrated under a design framework. A semester long project is conducted to design a thermal system, perform system simulations, and to optimize the design based on economic and technical considerations.

Special Note: Not available for credit to students who have completed ME A655.

May Be Stacked With: ME A655

Prerequisites: ES A341 with a minimum grade of C and ES A346 with a minimum grade of C.

ME A459 Fracture Mechanics 3 Credits

The topics of theoretical, experimental, and applied fracture of solids, structures, and machines, subcritical crack growth including fatigue, creep, and corrosion, embrittlement, safety, and life cycle design and analysis will be presented. Case studies will be used to illustrate the course topics.

May Be Stacked With: ME A659

Prerequisites: ES A331 with a minimum grade of C.

ME A460 Turbomachinery 3 Credits

Introduces the application of energy, momentum and continuity equations to designing turbomachinery such as pumps, compressors and turbines.

Special Note: Not available for credit to students who have completed ME A660.

May Be Stacked With: ME A660

Prerequisites: ES A341 with a minimum grade of C and ES A341L with a minimum grade of C and ME A313 with a minimum grade of C.

ME A471 Automatic Control 3 Credits

Feedback control of linear mechanical and electrical systems by using block diagrams with transfer functions of plants, controllers, sensors and actuators. Stability analysis with transfer-function and state-space models. Transient, steady-state analysis, frequency-domain analysis, and design of control systems with Bode plots and the Nyquist criterion.

Crosslisted With: EE A471.

Prerequisites: (EE A306 or ME A306 or EE A353) and (ES A208 or ES A210) and MATH A302.

ME A608 Mechanical Vibrations 3 Credits

Modeling of vibratory mechanical systems with single and multiple degrees of freedom. Study of free and forced vibrations with or without damping by lumped-parameter methods and finite element analysis. Vibrations of rotor systems and vibration monitoring.

Special Note: Not available for credit to students who have completed ME A408.

Registration Restrictions: Graduate standing or instructor permission.

May Be Stacked With: ME A408

ME A610 Biomechanics 3 Credits

Applies the principles of mechanics to biological systems with an emphasis on the human body. Both analytical mathematical modeling and experimental approaches are explored.

Registration Restrictions: Graduate standing or instructor permission

ME A615 Composite Materials 3 Credits

This course presents the mechanics and manufacturing of composite materials and their applications. The analysis, design, processing/fabrication, repair, and evaluation of composite materials and structures are considered.

Special Note: Not available for credit to students who have completed ME A415.

Registration Restrictions: Graduate standing or instructor permission.

May Be Stacked With: ME A415

ME A621 Engineering Finite Element Analysis 3 Credits

Covers the mathematical formulation of the finite element analysis (FEA) method; elemental matrices, nodal loads, assembly, and solution of finite element problems; static, modal and dynamic solid-mechanics FEA problems; heat transfer, fluid mechanics, and electromagnetic FEA problems; and FEA software: preprocessing, processing, and postprocessing.

Special Note: Not available for credit to students who have completed ME A421.

Registration Restrictions: Graduate standing or instructor approval

May Be Stacked With: ME A421

ME A630 Advanced Mechanics of Materials 3 Credits

Theory of stress and strain, stress-strain-temperature relations, equilibrium, and energy methods and their application to the torsion of shafts, bending of straight and curved beams, beams on elastic foundations, thin and thick walled cylinders, elastic and inelastic stability of columns, plates and shells, stress concentrations, creep, and contact stresses.

Registration Restrictions: Graduate standing and instructor permission

ME A642 Advanced Fluid Mechanics 3 Credits

Advanced topics in fluid mechanics, including derivation of flow equations, ideal fluid flows, incompressible viscous flows and compressible inviscid flows.

Special Note: Not available for credit to students who have completed ME A442.

Registration Restrictions: Graduate standing or instructor permission.

May Be Stacked With: ME A442

ME A651 Aerodynamics 3 Credits

Fundamentals of aerodynamics including boundary layer theories, aerodynamics of lifting flow over airfoils, wings of finite span and airfoil theory in subsonic, transonic, and supersonic flows. Literature review and research on selected aerodynamics topics.

Special Note: Not available for credit to students who have completed ME A451.

Registration Restrictions: Graduate standing or instructor permission.

May Be Stacked With: ME A451

ME A653 Renewable Energy Systems Engineering 3 Credits

The study and design of renewable energy systems from a technical engineering standpoint. Solar, hydrokinetic, conventional hydroelectric, wind, geothermal, and biological energy systems will be examined. Additional topics include feasibility analysis and energy storage techniques.

Special Note: Not available for credit to students who have completed ME A453.

May Be Stacked With: ME A453

ME A655 HVAC Systems Optimization 3 Credits

Design of thermal and heating, ventilation, and air-conditioning (HVAC) systems with emphasis on economic considerations and optimization. Concepts of thermodynamics, fluid mechanics and heat transfer will be integrated under a design framework. A semester long project is conducted to design a thermal system, perform system simulations, and to optimize the design based on economic and technical considerations.

Special Note: Not available for credit to students who have completed ME A455.

Registration Restrictions: Graduate standing or instructor permission.

May Be Stacked With: ME A455

ME A659 Fracture Mechanics 3 Credits

Theoretical, experimental, and applied fracture of solids, structures, and machines, subcritical crack growth including fatigue, creep, and corrosion, embrittlement, safety, and life cycle design and analysis will be presented. Case studies will be used to illustrate the course topics.

May Be Stacked With: ME A459

Prerequisites: ES A331 with a minimum grade of C.

ME A660 Turbomachinery 3 Credits

Introduces the application of energy, momentum and continuity equations to designing turbomachinery, such as pumps, compressors and turbines.

Special Note: Not available for credit to students who have completed ME A460.

Registration Restrictions: Graduate standing or instructor permission

May Be Stacked With: ME A460

ME A664 Corrosion Processes and Engineering 3 Credits

The study of different corrosion processes and mechanisms. Topics include the concepts, materials, and mechanisms of corrosion with application to engineering design for corrosion prevention.

Registration Restrictions: Prerequisite and graduate standing, or faculty permission.

Prerequisites: ES A346.

ME A672 Advanced Linear Systems 3 Credits

Presents a state space linear algebra approach to multiple input, multiple output systems. Concepts of controllability and observability motivate design techniques for optimal open loop and closed loop systems. Analysis and design of optimal feedback control systems and design of observers and estimators are presented.

Special Note: Not available for credit to students who have completed EE A472.

Registration Restrictions: Graduate standing or instructor permission

May Be Stacked With: EE A472

ME A686 Project 3 Credits

Project arranged among the advisor, graduate advisory committee and student to solve a practical engineering problem.

Registration Restrictions: Graduate standing and instructor permission

ME A699 Thesis 1-6 Credits

Individual study of an advanced engineering problem resulting in a thesis.

Registration Restrictions: Graduate standing and instructor permission

Medical Assisting (MA)

Courses

MA A101 Medical Terminology 3 Credits

Medical terminology, including analysis of its roots and origins. Includes anatomical, diagnostic, operative, and laboratory terminology of human body systems and selected medical specialties. Emphasizes spelling and pronunciation.

MA A104 Essentials of Human Disease 3 Credits

Presents a systematic approach to the study of human diseases with an emphasis on signs and symptoms, etiology, and treatment of the more common diseases and clinical disorders. Includes the application of advanced medical terminology in the study of human diseases and pathology.

Prerequisites: MA A101 with a minimum grade of C.

MA A120 Medical Office Procedures 4 Credits

Introduces business aspects of medical offices and administrative duties of medical assistants. Includes telephone and reception procedures, appointment scheduling, medical law and ethics, essentials of medical records, professionalism, and financial record keeping for the medical office.

MA A140 Healthcare Documentation 2-3 Credits

Instruction and practice in transcribing healthcare providers' medical dictation using transcription software and formatting of medical reports utilizing transcription techniques and guidelines. Introduction to the electronic health record (EHR), including practice entering clinical notes in an EHR. Examination of health information literacy, including methods for finding, evaluating and using health information.

Special Note: Two credits of this course are required for the AAS in Medical Assisting. Students wishing to specialize in medical transcription may wish to register for 3 credits, which requires the transcribing of additional medical reports.

Prerequisites: MA A101 with a minimum grade of C or concurrent enrollment.

MA A220 Coding for the Medical Office 3 Credits

Examines procedural and diagnostic coding in the ambulatory health care setting. Includes principles of medical coding, conventions and guidelines, importance of accuracy in coding, and an understanding of legal and ethical issues. Emphasis on application of knowledge demonstrated through performance of procedural and diagnostic coding activities.

Prerequisites: MA A101 with a minimum grade of C and (BIOL A100 with a minimum grade of C or (BIOL A111 with a minimum grade of C and BIOL A112 with a minimum grade of C)).

MA A235 Medical Insurance, Billing and Healthcare Documentation 3 Credits

Examines healthcare reimbursement practices, including the fundamentals of medical billing and insurance claims. Includes instruction and practice in healthcare documentation practices, health literacy concepts, electronic health records (EHR) and medical scribe information.

Prerequisites: MA A220 with a minimum grade of C.

MA A240 Medical Transcription II 3 Credits

Advanced and complex machine transcription from various medical specialties.

Prerequisites: MA A140 with a minimum grade of C.

MA A250 Clinical Procedures I 4 Credits

Introduces clinical duties of medical assisting. Includes asepsis, infection control, vital signs, assisting with routine patient care, maintenance of the exam room and medical equipment.

MA A255 Clinical Procedures II 4 Credits

Clinical duties of medical assisting. Includes minor office surgery, administration of medications, CLIA-waived laboratory procedures, venipuncture, electrocardiography and emergency procedures.

Prerequisites: MA A250 with a minimum grade of C.

MA A295 Medical Office Externship 5 Credits

Provides an opportunity to apply principles, skills and knowledge in private medical offices and clinics as final preparation for employment in the field. Duties are assigned by the UAA instructor and supervised by the physician(s) and medical assistants. Learning is enhanced by on-campus seminars.

Special Note: A grade of C or better in all courses required for the nontranscripted departmental Certificate of Completion in Medical Assisting.

MA A320 Advanced Case Studies in Medical Coding 2 Credits

Presents in-depth practice with procedural and diagnostic coding as it applies to the ambulatory care setting through the analysis of case studies. Strengthens and improves coding skills by comprehensively coding both diagnoses and procedures for the same medical record.

Prerequisites: MA A220.

Medical Lab Tech (MEDT)

Courses

MEDT A110 Specimen Processing 3 Credits

Introduces common procedures used to safely and accurately collect, separate and transport specimens prior to testing. Clerical and technical responsibilities of the clinical assistant are introduced, including accessioning, determining specimen acceptability and problem solving. Lab information system processes, quality assurance and compliance within the laboratory will be included.

Registration Restrictions: Departmental approval. Prerequisite may be waived with documented experience in phlebotomy as assessed by faculty.

Prerequisites: MEDT A101 with a minimum grade of C.

MEDT A132 Phlebotomy and Specimen Processing Techniques 2 Credits

Introduces the basic terms, concepts, procedures and equipment used in phlebotomy. Includes professional ethics and laws.

Registration Restrictions: Departmental approval

Prerequisites: Accuplacer-Reading Comp with a score of 120.

MEDT A132L Phlebotomy and Specimen Processing Techniques Lab 2 Credits

Develops skills in safely performing phlebotomy and specimen processing techniques.

Registration Restrictions: Departmental approval

Prerequisites: MEDT A132 with a minimum grade of C or concurrent enrollment.

MEDT A133 Basic Techniques in Laboratory Medicine 2 Credits

Introduces the basic terms, concepts, procedures and equipment used in a clinical laboratory. Includes regulatory agencies, laboratory measurements and calculations, laboratory information systems, and quality assessment.

Prerequisites: MEDT A132 with a minimum grade of C or concurrent enrollment and BIOL A112 with a minimum grade of C and CHEM A104 with a minimum grade of C and CHEM A104L with a minimum grade of C.

MEDT A134 Immunology and Serology 3 Credits

Introduces concepts of the immune system, including development, function and failures. Discusses principles of antigen-antibody reactions and serologic procedures performed in the clinical laboratory to diagnose diseases.

Prerequisites: MEDT A132 with a minimum grade of C or concurrent enrollment and BIOL A112 with a minimum grade of C and CHEM A104 with a minimum grade of C and CHEM A104L with a minimum grade of C.

MEDT A195A Phlebotomy Practicum 4 Credits

Applies principles of safety, specimen requisitioning, collection, handling and processing techniques to patient testing in a clinical laboratory. Prepares students for entry-level employment as a phlebotomist.

Registration Restrictions: Departmental approval

Prerequisites: (MEDT A132 with a minimum grade of C and MEDT A132L with a minimum grade of C) or COHI A201 with a minimum grade of C.

MEDT A195C Phlebotomy Practicum / Distance 6 Credits

Provides clinical practicum in area hospitals/facilities for phlebotomy. Applies didactic theories of phlebotomy techniques. Prepares students for certification exam.

Special Note: This course is for distance phlebotomy students who have not taken the in-person course and practiced phlebotomy skills.

Registration Restrictions: Departmental approval

Prerequisites: MEDT A132 with a minimum grade of C or COHI A201 with a minimum grade of C.

MEDT A202 Clinical Chemistry 4 Credits

Develops skills in performing chemical analysis of blood and other body fluids. Discusses and practices specific testing procedures for different organ systems and analytes. Presents correlation of laboratory results with clinical findings. Emphasizes quality assessment.

Prerequisites: MEDT A132 with a minimum grade of C and MEDT A132L with a minimum grade of C and MEDT A133 with a minimum grade of C and MEDT A134 with a minimum grade of C.

MEDT A203 Clinical Microbiology 6 Credits

Emphasizes culture media, biochemical tests, immunoassays, and staining techniques used in the identification and susceptibility testing for microorganisms of medical importance to humans. Includes bacteriology and an introduction to parasitology, mycology and virology.

Prerequisites: MEDT A132 with a minimum grade of C and MEDT A132L with a minimum grade of C and MEDT A133 with a minimum grade of C and MEDT A134 with a minimum grade of C.

MEDT A204 Hematology and Coagulation 6 Credits

Emphasizes the theory and practice of manual and automated procedures in hematology and coagulation and the relationship of these procedures to the diagnosis of disease.

Prerequisites: MEDT A132 with a minimum grade of C and MEDT A132L with a minimum grade of C and MEDT A133 with a minimum grade of C and MEDT A134 with a minimum grade of C.

MEDT A208 Urine and Body Fluid Analysis 3 Credits

Examines the physical, chemical and microscopic properties of urine and other body fluids. Correlates selected chemical and microscopic constituents of urine and other body fluids with various disease states.

Prerequisites: MEDT A132 with a minimum grade of C and MEDT A132L with a minimum grade of C and MEDT A133 with a minimum grade of C and MEDT A134 with a minimum grade of C.

MEDT A211 Blood Banking 4 Credits

Introduces the theory of antigen-antibody reactions as it relates to blood grouping and typing, antibody detection and compatibility testing. Discusses blood donor screening and component preparations, storage and transportation.

Prerequisites: MEDT A132 with a minimum grade of C and MEDT A132L with a minimum grade of C and MEDT A133 with a minimum grade of C and MEDT A134 with a minimum grade of C.

MEDT A250 Cultural Diversity in Health Care 1 Credit

Challenges students to examine their cultural biases and to recognize the importance of cultural awareness in providing exceptional medical care. Examines community, personal and family relationships through the lens of cross-cultural health and healing practices. Introduces health care consumers from various cultural backgrounds.

MEDT A301 Molecular and Emerging Diagnostics 3 Credits

Examines the practice of molecular biology and its applications in the clinical laboratory. Topics include human genetics; isolation, amplification, discrimination and detection techniques for nucleic acids; and the design and operation of a molecular diagnostic laboratory. Introduces emerging diagnostics and their applications in the clinical laboratory.

Prerequisites: MEDT A203 with a minimum grade of C and MEDT A204 with a minimum grade of C.

MEDT A302 Clinical Laboratory Education and Management 4 Credits

Introduces educational and management principles and tools applicable to laboratory medicine and allied health science professions. Provides basic management skills necessary to function in a technologically dynamic environment. Topics include the educational process and teaching methods and basic managerial subjects including human resources and financial management. The course is designed for students with an educational or working background in the clinical laboratory or other health care field.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses, junior standing and departmental approval.

Attributes: UAA Integrative Capstone GER.

MEDT A303 Advanced Clinical Microbiology 6 Credits

Examines microorganisms of medical importance to humans. Includes unusual pathogenic and anaerobic bacteriology, mycology, parasitology, and virology with emphasis on identification, susceptibility testing, and epidemiology.

Prerequisites: MEDT A203 with a minimum grade of C.

MEDT A306 Advanced Immunology and Blood Banking 3 Credits

Emphasizes advanced concepts in immunology and blood banking to solve complex problems. Topics include current transfusion practices, recent advances in transfusion medicine, human leukocyte antigen (HLA) testing, autoimmune disorders and cell identification using flow cytometry. Prepares students to perform and interpret tests done during the serology and blood bank rotations of their clinical practicum (MEDT A495).

Registration Restrictions: Departmental approval

Prerequisites: MEDT A211 with a minimum grade of C.

Corequisites: MEDT A306L.

MEDT A307 Clinical Correlations 2 Credits

Applies knowledge, critical thinking and problem solving skills to case studies in all of the laboratory disciplines. Emphasizes clinical interpretation and correlation at an advanced level.

Prerequisites: MEDT A202 with a minimum grade of C and MEDT A203 with a minimum grade of C and MEDT A204 with a minimum grade of C and MEDT A208 with a minimum grade of C and MEDT A211 with a minimum grade of C.

MEDT A395 Medical Laboratory Technology Practicum 12 Credits

Applies knowledge and skills acquired in medical laboratory science (MEDT) courses to laboratory testing at a clinical facility. Supervised by UAA faculty and clinical laboratory personnel.

Prerequisites: MEDT A202 with a minimum grade of C and MEDT A203 with a minimum grade of C and MEDT A204 with a minimum grade of C and MEDT A208 with a minimum grade of C and MEDT A211 with a minimum grade of C.

MEDT A401 Introduction to Research 2 Credits

Applies research and presentation methods to current topics in medical laboratory science.

Prerequisites: (STAT A200 with a minimum grade of C or STAT A253 with a minimum grade of C) and (WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C).

MEDT A402 Medical Laboratory Science Honors: Quality Assessment Project 3 Credits

Applies basic research techniques and quality assessment principles to address a quality care issue.

Registration Restrictions: MLS major and departmental approval

Prerequisites: MEDT A302 with a minimum grade of C and MEDT A401 with a minimum grade of C or concurrent enrollment.

MEDT A495 Medical Laboratory Science Practicum 11 Credits

Integrates knowledge and applies skills acquired in medical laboratory science (MEDT) courses to laboratory testing at a clinical facility. Students are supervised by UAA faculty and clinical laboratory personnel.

Registration Restrictions: Departmental approval

Prerequisites: MEDT A301 with a minimum grade of C and MEDT A302 with a minimum grade of C and MEDT A303 with a minimum grade of C and MEDT A306 with a minimum grade of C and MEDT A307 with a minimum grade of C.

MEDT A601 Diagnostic Flow Cytometry 3 Credits

Examines technical and managerial information about flow cytometry and its applications in the clinical laboratory.

Registration Restrictions: Bachelor of Science in Medical Technology and departmental approval.

Prerequisites: MEDT A204 with a minimum grade of C.

Medicine Doctorate (MD)

Courses

MD A602 Introductory Primary and Continuity Care Clerkship 1-2 Credits

Introduces medical students to continuity of care by working with practicing physicians. Course demonstrates how to work with individuals to help them achieve optimal health, and includes topics in primary and preventative care, geriatrics, rehabilitation, palliative care, behavioral health, and pain management.

Special Note: May be repeated twice for credit.

Registration Restrictions: Admission to WWAMI MD program

MD A603 Clinical Skills 3-4 Credits

Instruction in communication skills, interviewing techniques, physical examination, documentation and clinical reasoning to introduce the physician role. Course will include hospital-based patient encounters to develop comfort with the physician role.

Special Note: May be repeated twice for credit.

Registration Restrictions: Admission to WWAMI MD program

MD A604 Ecology of Health and Medicine - Foundations 1 1 Credit

Emphasizes core concepts needed for clinical practice in the changing healthcare environment. Explores areas related to humanism in medicine, including the themes of diversity; health equity; ethics; professionalism; and determinants of health, such as models of health disease distribution, population health, ethical principles, respect, communication, evidence-based practice, the influence of health services on health, health system structures, and concepts of systems thinking.

Special Note: This course is taught in a 1-week intensive format.

Registration Restrictions: Admission to WWAMI MD program

MD A605 Ecology of Health and Medicine - Foundations 2 1 Credit
Emphasizes core concepts needed for clinical practice in the changing healthcare environment. Explores areas related to humanism in medicine, including the themes of diversity; health equity; ethics; professionalism; and determinants of health, such as pathways of health disparities, method of ethical analysis, accountability and compassion, roles, influence of social factors on health, health systems policy and the Triple Aim, and application of systems thinking.

Special Note: This course is taught in a 1-week intensive format.

Registration Restrictions: Admission to WWAMI MD program

Prerequisites: MD A604.

MD A606 Ecology of Health and Medicine - Foundations 3 1 Credit
Emphasizes core concepts needed for clinical practice in the changing healthcare environment. Explores areas related to humanism in medicine, including the themes of diversity; health equity; ethics; professionalism; and determinants of health, such as interplay of components of Ecosocial Model, ethical case analysis, advocacy and integrity, high-functioning teams, influence of individual factors on health, health economics, patient safety, health metrics, and application of systems thinking.

Special Note: This course is taught in a 1-week intensive format.

Registration Restrictions: Admission to WWAMI MD program

Prerequisites: MD A604 and MD A605.

MD A607 Ecology of Health and Medicine - Foundations 4 1 Credit
Emphasizes core concepts needed for clinical practice in the changing healthcare environment. Explores areas related to humanism in medicine, including the themes of diversity; health equity; ethics; professionalism; and determinants of health, such as accountability in health disparities, ethical case analysis, excellence, conflict resolution, primary care and rural medicine systems, informed medical decision making, advanced patient safety, global burden of disease, application of systems thinking.

Special Note: This course is taught in a 1-week intensive format.

Registration Restrictions: Admission to WWAMI MD program

Prerequisites: MD A604 and MD A605 and MD A606.

MD A610 Molecular and Cellular Basis of Disease 6 Credits
Introduces cell physiology, cell biology, and cell function, genes, genetics and genetic diseases/disorders incorporating fundamental principles in anatomy, pathology and pharmacology. Topics include membrane physiology, sensory receptors, muscle energetics and contractibility, autonomic nervous system, tissue response to disease, pharmacodynamics, pharmacokinetics and pharmacogenetics.

Registration Restrictions: Admission to WWAMI MD program

MD A620 Invaders and Defenders 5 Credits

Introduces the immune system, microbial biology, infectious diseases, inflammation and repair, and skin and connective tissue incorporating applicable fundamental principles in anatomy, pathology and pharmacology. Topics discussed include the pathogenesis and immunity of infectious disease, immunodeficiencies, hypersensitivity, autoimmunity, and the basis of immunologic diagnostics.

Registration Restrictions: Admission to WWAMI MD program

MD A630 Circulatory System 9 Credits

Provides an interdisciplinary approach to cardiovascular, respiratory and renal-urinary medicine, including anatomy, physiology, imaging, pathology, medicine and surgery.

Registration Restrictions: Admission to WWAMI MD program

MD A640 Blood and Cancer 2 Credits

Introduces fundamental principles of hematology and oncology, incorporating relevant concepts from anatomy, histology, pathology, imaging and pharmacology. Topics include abnormalities of hemostasis, basic pathophysiologic mechanisms leading to disturbances of blood cells, and mechanisms of genetic dysregulation in neoplasia, including the etiology, presentation and treatment of archetypal cancers.

Registration Restrictions: Admission to the WWAMI MD program

MD A650 Energetics and Homeostasis 5 Credits

Introduces the physiology and pathology of digestion and hepatic function, including obesity and diabetes, principles and practice of clinical nutrition, the endocrine integration of metabolism, and clinically important endocrine pathophysiology, including relevant topics of anatomy, pathology and pharmacology.

Registration Restrictions: Admission to WWAMI MD program

MD A660 Mind, Brain and Behavior 8 Credits

Presents the organization and function of the head, neck and central nervous system with a focus on clinically applying this knowledge to systematically approach the differential diagnosis and management of major neurologic, psychiatric and behavioral disorders. Current therapeutic approaches to disease are explained, including pharmacological, behavioral, surgical and other therapies.

Registration Restrictions: Admission to WWAMI MD program

MD A670 Lifecycle and Reproduction 4 Credits

Introduces normal and abnormal human development, reproductive functions including ova and sperm development, menstruation, normal pregnancy, and labor and delivery along with infertility, family planning techniques, and reproductive aging; integrates relevant fundamental principles in pelvic anatomy, pathology, histology, imaging and pharmacology.

Registration Restrictions: Admission to WWAMI MD program

Microbiology (MBIO)

Courses

MBIO A340 Microbial Biology 3 Credits

Focuses on diversity, physiology, genetics and ecology of microorganisms.

Prerequisites: BIOL A242 with a minimum grade of C and BIOL A252 with a minimum grade of C.

MBIO A342 Experiential Learning: Microbial Biology **4 Credits**

Applies theory and lab practice in microbial diversity, growth, ecology, and identification of environmental and medically-important microorganisms. Emphasizes experimental design, scientific writing and oral presentation skills.

Special Note: This experiential learning course includes supervised lab time, unsupervised lab time and outside work.

Prerequisites: (BIOL A243 with a minimum grade of C or BIOL A273 with a minimum grade of C) and MBIO A340 with a minimum grade of C or concurrent enrollment.

MBIO A410 Microbial Physiology **3 Credits**

Explores the fundamental physiological principles of microorganisms. Emphasizes cellular structure and function relationships, and growth, metabolism and metabolic regulation in the context of microbial genomics and evolution. Evaluates use of modern tools in microbial physiology research.

Prerequisites: MBIO A340 with a minimum grade of C.

MBIO A420 Pathogenic Microbiology **3 Credits**

Discusses mechanisms of microbial pathogenesis and developments and challenges in prevention and treatment of infectious disease. Examines current topics in public health and public health policies related to pathogenic microorganisms.

Prerequisites: MBIO A340 with a minimum grade of C.

MBIO A421 Experiential Learning: Pathogenic Microbiology **4 Credits**

Introduces concepts and laboratory techniques in pathogenic microbiology. Focuses on experimental analysis of selected bacterial, fungal, viral, protozoan and multicellular pathogens. Emphasizes experimental design, scientific writing and oral presentation skills.

Prerequisites: MBIO A342 with a minimum grade of C and MBIO A420 with a minimum grade of C or concurrent enrollment.

MBIO A440 Microbial Diversity **3 Credits**

Discusses molecular, biochemical and evolutionary diversity of the microbial world including Bacteria, Archaea, Eukarya and viruses. Includes concepts of microbial speciation and approaches for recognizing metabolic, phylogenetic and genomic diversity of cultivated and uncultivated bacteria.

Prerequisites: MBIO A340 with a minimum grade of C.

MBIO A450 Microbial Ecology **3 Credits**

Explores the natural history and diversity of the microbial world. Discusses microbial population and community ecology, the role of microorganisms in the cycling of elements, and symbioses.

Special Note: Not available for credit to students who have completed MBIO A650.

May Be Stacked With: MBIO A650

Prerequisites: MBIO A340 with a minimum grade of C.

MBIO A451 Microbial Biotechnology **3 Credits**

Discusses the application of microbiology for improvement of humankind, including genetic engineering of microorganisms to produced products of importance to human health, microbe-based foods and beverages, microbe-based bio-control, biofuels, and bioremediation.

Prerequisites: MBIO A340 with a minimum grade of C.

MBIO A452 Microbial Genetics **3 Credits**

Explores the mutation, transmission, selection and evolution of genetic information in microbes. Discusses the mechanisms by which transmission of genetic information impacts microbe-microbe and host-microbe interactions.

Prerequisites: BIOL A240 with a minimum grade of C or MBIO A340 with a minimum grade of C.

MBIO A453 Experiential Learning: Microbial Ecology **4 Credits**

Applies theory and laboratory techniques in microbial ecology, diversity and evolution. Emphasizes experimental design, scientific writing and oral presentation skills.

Prerequisites: MBIO A342 with a minimum grade of C.

MBIO A462 Virology **3 Credits**

Introduces concepts in human virology, with an emphasis on cell and molecular biology of virus structures, viral life cycles, interactions with host cells, immune responses and disease pathogenesis. Discusses viral genomics, evolution, emergence and advanced experimental methods for analyzing virus genome sequences.

Special Note: Not available for credit to students who have completed MBIO A662.

May Be Stacked With: MBIO A662

Prerequisites: BIOL A242 with a minimum grade of C and BIOL A252 with a minimum grade of C.

MBIO A468 Geomicrobiology **3 Credits**

Examines the mutual interactions between geology and microbiology. Emphasizes microbial processes that affect local and global environments including biogeochemical cycles, co-evolution, microbe-mineral interactions and life in extreme environments.

Crosslisted With: GEOL A468

Prerequisites: MBIO A340 with a minimum grade of C or GEOL A360 with a minimum grade of C.

Attributes: UAA Integrative Capstone GER.

MBIO A650 Advanced Microbial Ecology **3 Credits**

Advanced exploration of the natural history and diversity of the microbial world. Discusses microbial population and community ecology, the role of microorganisms in the cycling of elements, and symbioses.

Special Note: Not available for credit to students who have completed MBIO A450.

Registration Restrictions: Graduate standing

May Be Stacked With: MBIO A450

MBIO A662 Advanced Virology **3 Credits**

Advanced concepts in human virology. An in-depth focus on cell and molecular biology of virus structures, viral life cycles, interactions with host cells, immune responses and disease pathogenesis. Viral genomics, evolution, emergence and advanced experimental methods for analyzing virus genome sequences will be discussed.

Special Note: Not available for credit to students who have completed MBIO A462.

Registration Restrictions: Graduate standing

May Be Stacked With: MBIO A462

Military Science (MILS)

Courses

MILS A101 Leadership and Personal Development 1 Credit

Introduces students to the personal challenges and competencies that are critical for effective leadership. Educates students on how the personal development of life skills such as time management, physical fitness and stress management relate to leadership, officership and Army operations. Develops basic knowledge and comprehension of Army Leadership Dimensions while gaining a big-picture understanding of the ROTC program, its purpose in the Army and its advantages for the student.

Corequisites: MILS A150.

MILS A102 Introduction to Tactical Leadership 1 Credit

Overview of leadership fundamentals such as setting direction, problem-solving, listening, presenting briefs, providing feedback and using effective writing skills. Explores dimensions of leadership attributes and core leader competencies in the context of practical, hands-on and interactive exercises.

Corequisites: MILS A150.

MILS A150 Army ROTC Leadership and Physical Training Laboratory 1 Credit

Allows for practical experience of theories learned in a classroom environment. Exercises principles of patrolling, land navigation and physical training in a real world environment. Evaluates proficiency in one field training exercise per semester lasting no longer than 72 hours. Tests their academic knowledge and prepares them for their future roles as United States Army Officers.

Registration Restrictions: Students must be enrolled in Army ROTC academic courses unless they have completed all ROTC academic courses for program completion. Corequisites are: MILS A101 or MILS A102 or MILS A201 or MILS A202 or MILS A301 or MILS A302 or MILS A401 or MILS A402.

MILS A201 Foundations of Leadership 3 Credits

Explores the dimensions of creative and innovative tactical leadership strategies and styles by examining team dynamics and two historical leadership theories that form the basis of the Army leadership framework. Evaluates personal motivation and team building through planning, executing and assessing team exercises.

Prerequisites: MILS A102.

Corequisites: MILS A150.

MILS A202 Foundations of Tactical Leadership 3 Credits

Examines the challenges of leading tactical teams in the complex contemporary operating environment (COE). The course highlights dimensions of terrain analysis, patrolling, and operation orders. Explores the dynamics of adaptive leadership in the context of military operations through the study of the theoretical basis of the Army Leadership Requirements Model.

Prerequisites: MILS A201.

Corequisites: MILS A150.

MILS A301 Adaptive Team Leadership 3 Credits

Challenges students to study, practice, and evaluate adaptive leadership skills as they are presented with challenging scenarios related to squad tactical operations. Provides systematic and specific feedback on students' leadership attributes and actions. Develops leadership and critical thinking abilities.

Registration Restrictions: Restricted to contracted ROTC cadets only.

Prerequisites: MILS A202.

Corequisites: MILS A150.

MILS A302 Applied Team Leadership 3 Credits

Uses increasingly intense situations for applied team leadership challenges to build student awareness and skills in leading tactical operations at the small unit level. Students review aspects of full spectrum operations. Develops proficiency in the operations orders process by conducting military briefings.

Registration Restrictions: Restricted to contracted ROTC cadets only.

Prerequisites: MILS A301.

Corequisites: MILS A150.

MILS A401 Adaptive Leadership 3 Credits

Transitions the focus of student learning from being trained, mentored and evaluated as an MS III Cadet to learning how to train, mentor and evaluate underclass Cadets. Explains the duties and responsibilities of an Army staff officer. Applies the Military Decision Making Process, Army writing style and the Army's principles of training and training management cycle during weekly training meetings to plan, execute and assess battalion training events. Demonstrates Army values and ethics and how to apply them to everyday life as well as in the Contemporary Operating Environment. Examines the officer's role in the Uniform Code of Military Justice, counseling subordinates, and methods on how to best manage their career as an Army Officer.

Registration Restrictions: Restricted to contracted ROTC cadets only.

Prerequisites: MILS A302.

Corequisites: MILS A150.

MILS A402 Leadership in a Complex World 3 Credits

Explores the dynamics of leading in the complex situations of current military operations in the contemporary operating environment (COE). Examines differences in customs and courtesies, principles of war, and rules of engagement in the face of international terrorism. Explores aspects of interacting with non-government organizations, civilians on the battlefield, and host nation support.

Registration Restrictions: Restricted to contracted ROTC cadets only.

Prerequisites: MILS A401.

Corequisites: MILS A150.

MILS A450 History of the United States Army 3 Credits

Develops student awareness of the relationship of the military establishment to society in the United States. Examines the evolution of war and the progression of military professionalism and provides an awareness of and purpose for military operations from colonial America to present day. Discusses the importance of understanding United States Army history as a part of the military profession. Analyzes the evolution of both tactics and force structure of the United States Army during these periods.

Registration Restrictions: Departmental approval

Music (MUS)

Courses

MUS A103 Matanuska-Susitna College Community Band **2 Credits**
Structured, established concert band.

Special Note: Age group ranges from 10-80. Experience ranges from basic to professional. Matanuska-Susitna College

Registration Restrictions: Play a concert band instrument or read music well enough to quickly learn one.

MUS A111 Fundamentals of Music **3 Credits**

Rudimentary work in the elements of music and an introduction to notation, rhythm, scales, keys, intervals, and musical terminology. Designed for students with little or no background in music reading or as a refresher course for those who have studied music.

MUS A112 Practical Theory **3 Credits**

Elementary study of harmony and melody: formation of scales, modes, intervals, chords, inversions, and simple harmonic progressions.

Writing and harmonizing of melodic lines.

Registration Restrictions: Ability to read music in treble and bass clef in all keys or permission of instructor.

Prerequisites: MUS A111.

MUS A121 Music Appreciation **3 Credits**

Basic elements of the physics of musical sound and music notation, followed by a survey of the history and development of Western music from the early Middle Ages to the present.

Special Note: Music majors may not use this course toward their GER Fine Arts requirement.

Attributes: UAA Fine Arts GER.

MUS A131 Music Theory I **3 Credits**

Organization of musical materials with emphasis on diatonic functional harmony. Introduction to part writing and keyboard skills.

Corequisites: MUS A133.

MUS A132 Music Theory II **3 Credits**

Continuation of MUS A131, emphasizing part writing and melody harmonization. Introduction of non-harmonic tones and modulation and development of practical keyboard skills.

Prerequisites: MUS A131.

Corequisites: MUS A134.

MUS A133 Aural Skills I **2 Credits**

The development of skills in reading and hearing music through the study of sight singing and dictation.

Corequisites: MUS A131.

MUS A134 Aural Skills II **2 Credits**

The development of skills in reading and hearing music through the study of sight singing and dictation. Continuation of MUS A133.

Prerequisites: MUS A133.

Corequisites: MUS A132.

MUS A140 Fingerstyle Guitar I **2 Credits**

Beginning course for those who do not read music or who have limited experience with the guitar. Reading and performing melodies, solos, and accompaniment on the guitar from standard treble staff notation. Use of traditional and contemporary musical examples to teach at least 13 basic chords in the first position, alternating bass technique, and six fingerstyle patterns.

Special Note: May be repeated once for credit. Students must furnish their own 6-string acoustic or classical guitar.

MUS A150 Piano Class I **1 Credit**

Fundamentals of piano techniques. Introduces note reading in five-finger positions in the keys of C and G, using folk and classical arrangements in simple meter. Classes conducted in piano lab.

MUS A152 Voice Class **1 Credit**

Introduces the study and practice of basic fundamentals of singing and song interpretation. Stresses breath support, healthy laryngeal function and good alignment. Covers healthy and efficient practice methods. Includes song interpretation and performance practice through a variety of assigned repertoire.

Special Note: Ability to read music not a prerequisite.

MUS A154A Functional Piano I **1 Credit**

Intended for music majors with little or no piano background. Student will practice from a beginning adult piano book to gain skills necessary to pass the harmonization/transposition or improvised melody component of the piano proficiency exam.

Special Note: May be repeated for a maximum of 4 credits.

May Be Stacked With: MUS A154B, MUS A154C, MUS A154D

Prerequisites: MUS A111 or concurrent enrollment.

MUS A154B Functional Piano II **1 Credit**

Intended for music majors who demonstrate enough piano ability to potentially pass a minimum of two components of the piano proficiency exam. Suggested components include: 1) harmonization and transposition of a simple melody; 2) improvised melody; 3) realization of a simple figured bass line. Student must pass a minimum of two components to pass this course.

May Be Stacked With: MUS A154A, MUS A154C, MUS A154D

Prerequisites: MUS A154A or concurrent enrollment.

MUS A154C Functional Piano III **1 Credit**

Intended for music majors who demonstrate enough piano ability to potentially pass a minimum of four components of the piano proficiency exam. Suggested components include: 1) harmonization and transposition of a simple melody; 2) improvised melody; 3) realization of a simple figured bass line; 4) a memorized performance of a Bach Two-Part Invention or a Clementi Sonatina; 5) an arrangement of a simple tune read from a lead sheet. Student may have previously passed some of these requirements in MUS A154B.

May Be Stacked With: MUS A154A, MUS A154B, MUS A154D

Prerequisites: MUS A154B or concurrent enrollment.

MUS A154D Functional Piano IV 1 Credit

Intended for music majors who demonstrate enough piano ability to potentially pass all six components of the piano proficiency exam. Components include: 1) a memorized performance of a Bach Two-Part Invention or a Clementi Sonatina; 2) the harmonization and transposition of a simple melody; 3) the sight-reading of a Bach Chorale; 4) the ability to improvise a simple melody; 5) the realization of a simple figured bass line; and 6) an arrangement of a simple tune read from a lead sheet. Student must complete all required components (necessary to the degree) to pass this course.

May Be Stacked With: MUS A154A, MUS A154B, MUS A154C

Prerequisites: MUS A154C or concurrent enrollment.

MUS A161 Private Lessons 2 Credits

Private music instruction in brass, guitar, organ, percussion, piano, strings, voice and woodwinds.

Special Note: In addition to lessons, students are required to attend a set number of department-approved recitals and/or concerts each semester.

Registration Restrictions: Departmental approval. Enrollment concurrent with appropriate master class.

MUS A161J 2 Credits**MUS A162 Private Lessons 2 Credits**

Continuation of MUS A161. Private instruction in brass, guitar, organ, percussion, piano, strings, voice and woodwinds.

Special Note: In addition to lessons, students are required to attend a set number of department-approved recitals and/or concerts each semester.

Registration Restrictions: Departmental approval. Enrollment concurrent with appropriate master class.

Prerequisites: MUS A161 with a minimum grade of C.

MUS A162J 2 Credits**MUS A163 Private Lessons (Non-Juried) 1-2 Credits**

Non-juried private music instruction in brass, guitar, harpsichord, organ, percussion, piano, strings, voice, and woodwinds.

Special Note: May be repeated for a maximum of 4 credits. Cannot be petitioned to substitute for juried lessons (MUS A161, MUS A162, MUS A261, MUS A262, MUS A361, MUS A362, MUS A461, and MUS A462).

Registration Restrictions: Departmental approval

MUS A164 Private Lessons (Non-Major) 1-2 Credits

Private music instruction in brass, guitar, harpsichord, organ, percussion, piano, strings, voice, and woodwinds.

Special Note: May be repeated for a maximum of 4 credits. For non-music majors and students not currently enrolled in a university music ensemble.

Registration Restrictions: Departmental approval.

MUS A215 Music of Alaska Natives and Indigenous Peoples of Northern Regions 3 Credits

Explores music and dance practices of Alaska Native and Indigenous peoples of the circumpolar north by region and culture group. Interdisciplinary methods will be used to examine the historical and social dynamics behind changing musical and cultural traditions. Fundamentals of ethnomusicology theory and research methods will be introduced.

Registration Restrictions: AKNS A201 or MUS A111 recommended prior to registering for this course.

Crosslisted With: AKNS A215.

Prerequisites: WRTG A111 with a minimum grade of C.

Attributes: UAA Fine Arts GER.

MUS A216 World Indigenous Music 3 Credits

Survey course on indigenous music cultures of the world. Musical traditions of Europe, the Americas, Africa, Asia, Oceania and the Near/Far East are examined within the context of musical styles and culture.

Crosslisted With: AKNS A216

Prerequisites: WRTG A111 with a minimum grade of C.

Attributes: UAA Fine Arts GER.

MUS A218A Alaska Native Drummaking Techniques: Athabascan and Southeast style 3 Credits

Studio course in which students will learn the fundamentals of making handheld frame drums in the Athabascan and Southeast Alaskan Indian style. Students will also study the living tradition of Alaska Native drum practices.

Crosslisted With: AKNS A218A

MUS A218B Alaska Native Drummaking Techniques: Inupiaq and Yup'ik Style 3 Credits

Studio course in which students learn the fundamentals of making hand held frame drums in the Inupiaq and Yup'ik Alaska Native style. Students will also study the living tradition of Alaska Native drum practices.

Crosslisted With: AKNS A218B

MUS A221 History of Western Art Music I 3 Credits

Examines stylistic developments and structures of important musical genres from antiquity to 1800 within their historical and cultural contexts.

Registration Restrictions: Departmental approval

Prerequisites: WRTG A111 with a minimum grade of C or concurrent enrollment.

Attributes: UAA Fine Arts GER.

MUS A222 History of Western Art Music II 3 Credits

Examines stylistic developments and structures of important musical genres from 1800 to the present within their historical and cultural contexts.

Registration Restrictions: Departmental approval

Prerequisites: WRTG A111 with a minimum grade of C or concurrent enrollment.

Attributes: UAA Fine Arts GER.

MUS A224 History of Jazz 3 Credits

Introduces the history and development of jazz from its early heritage to the present, emphasizing representative styles and individual or group contributors. Enhance regular classroom activities through recordings and guest artists.

Attributes: UAA Fine Arts GER.

MUS A231 Music Theory III 3 Credits

Functional harmony featuring part writing and melody harmonization and introducing chromatic harmony. Covers modulation, secondary dominant functions, and other altered chords along with analysis of binary and ternary forms.

Prerequisites: MUS A132.

Corequisites: MUS A233.

MUS A232 Music Theory IV 3 Credits

Continuation of MUS A231. Features borrowed chords and other types of chromatic harmonies. Surveys 20th Century harmony.

Prerequisites: MUS A231.

Corequisites: MUS A234.

MUS A233 Aural Skills III 2 Credits

The development of skills in reading and hearing music through the study of sight singing and dictation. Continuation of MUS A134.

Prerequisites: MUS A134.

Corequisites: MUS A231.

MUS A234 Aural Skills IV 2 Credits

The development of skills in reading and hearing music through the study of sight singing and dictation. Continuation of MUS A233.

Prerequisites: MUS A233.

Corequisites: MUS A232.

MUS A261 Private Lessons 2 Credits

Continuation of MUS A162. Private music instruction in brass, guitar, organ, percussion, piano, strings, voice and woodwinds.

Special Note: In addition to lessons, students are required to attend a set number of department approved recitals and/or concerts each semester.

Registration Restrictions: Departmental approval. Enrollment concurrent with appropriate master class.

Prerequisites: MUS A162 with a minimum grade of C.

MUS A262 Private Lessons 2 Credits

Continuation of MUS A261. Private music instruction in brass, guitar, organ, percussion, piano, strings, voice and woodwinds.

Special Note: In addition to lessons, students are required to attend a set number of department approved recitals and/or concerts each semester.

Registration Restrictions: Departmental approval. Enrollment concurrent with appropriate master class.

Prerequisites: MUS A261 with a minimum grade of C.

MUS A280 Basic Conducting 2 Credits

Introduces principles of conducting. Explores time-beating, use of left hand, score reading, and transposition as they relate to conducting.

Prerequisites: MUS A131.

MUS A301A University Singers 1 Credit

Rehearsal and performance of literature for large choral ensemble, including works from the Renaissance to the present day.

Special Note: May be repeated for credit. Elective credit for the non-music major. New members: see instructor at the first class for section placement.

May Be Stacked With: MUS A301B

MUS A301B University Singers 2 Credits

Rehearsal and performance of literature for large choral ensemble, including works from the Renaissance to the present day.

Special Note: May be repeated for credit. Ensemble credit for vocal majors. New members: see instructor at the first class for section placement.

May Be Stacked With: MUS A301A

MUS A302A Chamber Music and Accompanying 1 Credit

Ensemble course for the non-music major pianist. Covers the art of accompanying singers and instrumentalists and relevant skills such as sight-reading and score-reading.

Special Note: May be repeated for credit. Advanced vocalists and instrumentalists are also encouraged to enroll. New members: see instructor at the first class for section placement.

May Be Stacked With: MUS A302B

MUS A302B Chamber Music and Accompanying 2 Credits

Ensemble course for pianists. Covers the art of accompanying singers and instrumentalists and relevant skills such as sight-reading and score-reading.

Special Note: May be repeated for credit. Advanced vocalists and instrumentalists are also encouraged to enroll. New members: see instructor at the first class for section placement.

May Be Stacked With: MUS A302A

MUS A303A University Wind Ensemble 1 Credit

Provides in-depth rehearsal and performance of original band music and transcriptions from Renaissance up to and including 21st century literature. Ensemble for the non-music major.

Special Note: May be repeated for credit. New members: see instructor at the first class for section placement.

May Be Stacked With: MUS A303B

MUS A303B University Wind Ensemble 2 Credits

Provides in-depth rehearsal and performance of original band music and transcriptions from Renaissance up to and including 21st century literature. Ensemble course for woodwind, brass, and percussion majors.

Special Note: May be repeated for credit. New members: see instructor at the first class for section placement.

May Be Stacked With: MUS A303A

MUS A307A University Sinfonia 1 Credit

Intensive study of chamber orchestra literature leading to public performance. String music for intermediate and advanced performers. Includes wind and percussion players for specific works. Ensemble for non-music majors.

Special Note: May be repeated for credit. New members: see instructor at the first class for section placement.

May Be Stacked With: MUS A307B

MUS A307B University Sinfonia 2 Credits

Intensive study of chamber orchestra literature leading to public performance. String music for intermediate and advanced performers. Includes wind and percussion players for specific works. Ensemble for string majors.

Special Note: May be repeated for credit. New members: see instructor at the first class for section placement.

May Be Stacked With: MUS A307A

MUS A313 Opera Workshop 2 Credits

Provides for the rehearsal and performance of selected operas, operettas and musical theatre. Meets the small ensemble requirement for music majors.

Special Note: May be repeated for credit. Only 4 credits of MUS A313 may be applied to the Bachelor of Music degrees. New members: see instructor at the first class for section placement.

MUS A315 Jazz Theory I 3 Credits

Detailed study of jazz using modulation, sequence, transposition, arranging, and voicing through analysis and dictation. Course is adapted to individual students on keyboard or other instruments.

Registration Restrictions: Ability to read music, theory background, basic ability on an instrument.

Prerequisites: MUS A132 with a minimum grade of C.

MUS A316 Jazz Theory II 3 Credits

Application of skills obtained in MUS A315. Modulation, sequence, transposition, arranging and voicing are studied, with compositions performed by lab groups.

Prerequisites: MUS A315 with a minimum grade of C.

MUS A331 Form and Analysis 3 Credits

Structural principles of music of the 18th and 19th centuries.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing.

Prerequisites: MUS A232.

Attributes: UAA Integrative Capstone GER.

MUS A356 Yup'ik Music and Dance Ensemble 2 Credits

Ensemble course in Central Yup'ik Alaska Native music and dance. Teaches movement, singing, drumming and the cultural contextual aspects of Alaska Native dance, including history, culture and connection to language. Designed for students who are interested in learning about Alaska Native creative expression.

Special Note: May be repeated twice for credit.

Crosslisted With: AKNS A356

Prerequisites: AKNS A201 with a minimum grade of C or (AKNS A215 with a minimum grade of C or MUS A215 with a minimum grade of C) or (AKNS A216 with a minimum grade of C or MUS A216 with a minimum grade of C).

MUS A357 Inupiaq Music and Dance Ensemble 2 Credits

Ensemble course in Inupiaq Alaska Native music and dance. Teaches movement, singing, drumming and the cultural contextual aspects of Alaska Native dance, including history, culture and connection to language. Designed for students who are interested in learning about Alaska Native creative expression.

Special Note: May be repeated twice for credit.

Crosslisted With: AKNS A357

Prerequisites: AKNS A201 with a minimum grade of C or (AKNS A215 with a minimum grade of C or MUS A215 with a minimum grade of C) or (AKNS A216 with a minimum grade of C or MUS A216 with a minimum grade of C).

MUS A361 Private Lessons 2 Credits

Continuation of MUS A262. Private music instruction in brass, guitar, organ, percussion, piano, string, voice and woodwinds.

Special Note: In addition to lessons, students are required to attend a set number of department approved recitals and/or concerts each semester.

Registration Restrictions: Departmental approval. Enrollment concurrent with appropriate master class.

Prerequisites: MUS A262 with a minimum grade of C.

MUS A362 Private Lessons 2 Credits

Continuation of MUS A361. Private music instruction in brass, guitar, organ, percussion, piano, strings, voice and woodwinds.

Special Note: In addition to lessons, students are required to attend a set number of department-approved recitals and/or concerts each semester.

Registration Restrictions: Departmental approval. Enrollment concurrent with appropriate master class.

Prerequisites: MUS A361 with a minimum grade of C.

MUS A365 Chamber Ensemble 1 Credit

Instrumental/Vocal ensemble of three or more. Students select a faculty coach and prepare and deliver a chamber work in a Department event or other approved public venue.

Special Note: May be repeated for credit 3 times.

Registration Restrictions: Faculty approval.

Prerequisites: MUS A162.

MUS A371 Brass Methods and Techniques 2 Credits

Instruction in the brass instruments. The course is part of the teacher training program.

Special Note: Student must be able to read music fluently while performing on the brass instruments.

Prerequisites: MUS A232.

MUS A372 Woodwind Methods and Techniques 2 Credits

Instruction in the woodwind instruments. The course is part of the teacher training program.

Special Note: Student must be able to read music fluently while performing on the woodwind instruments.

Prerequisites: MUS A232.

MUS A373 String Methods and Techniques 2 Credits

Instruction in the stringed instruments of the orchestra and guitar. The course is part of the teacher training program.

Special Note: Student must be able to read music fluently while performing on the string instruments.

Prerequisites: MUS A232.

MUS A374 Voice Methods and Techniques 2 Credits

Instruction in musical voice technique and pedagogy. The course is part of the teacher training program.

Special Note: Student must be able to read music fluently and perform basic piano skills.

Prerequisites: MUS A232.

MUS A375 Percussion Methods and Techniques 2 Credits

Instruction in the percussion instruments. The course is part of the teacher training program.

Special Note: Student must be able to read music fluently while performing on the percussion instruments.

Registration Restrictions: Student must be able to read music fluently while holding/performing on the percussion instruments.

Prerequisites: MUS A232.

MUS A376 Elementary Music Methods and Techniques 2 Credits

Instruction in elementary music methods, techniques, learning theories and pedagogy. The course is part of the teacher training program.

Special Note: Students must be able to read music fluently.

Prerequisites: MUS A232.

MUS A381 Choral Conducting 2 Credits

Principles of conducting and interpreting choral music.

Prerequisites: MUS A232 and MUS A280.

MUS A382 Instrumental Conducting 2 Credits

Principles of conducting and interpreting instrumental music.

Prerequisites: MUS A232 and MUS A280.

MUS A405A University Jazz Ensemble 1 Credit

Rehearsal and performance of big band jazz. Music selected from a variety of styles and eras including swing, rock, fusion and pop. Ensemble for non-music majors.

Special Note: May be repeated for credit. New members: see instructor at the first class for section placement.

May Be Stacked With: MUS A405B

MUS A405B University Jazz Ensemble 2 Credits

Rehearsal and performance of big band jazz. Music selected from a variety of styles and eras including swing, rock, fusion and pop. Elective for music majors.

Special Note: May be repeated for credit.

Registration Restrictions: By audition

May Be Stacked With: MUS A405A

MUS A407 Jazz Combo 1 Credit

Rehearsal and performance of combo jazz styles. Music selected from a variety of styles and eras including swing, Latin, and fusion. Meets small ensemble requirement for music majors.

Special Note: May be repeated for credit. New members: see instructor at the first class for section placement.

Prerequisites: MUS A161 with a minimum grade of C.

MUS A408A University Percussion Ensemble 1 Credit

Study and performance of percussion chamber music including 20th century literature for percussion as well as transcriptions of earlier music. Ensemble for non-music majors.

Special Note: May be repeated for credit.

Registration Restrictions: By audition

May Be Stacked With: MUS A408B

MUS A408B University Percussion Ensemble 2 Credits

Study and performance of percussion chamber music including 20th century literature for percussion as well as transcriptions of earlier music. Elective for music majors.

Special Note: May be repeated for credit.

Registration Restrictions: By audition

May Be Stacked With: MUS A408A

MUS A409A University Guitar Ensemble 1 Credit

Study and performance of traditional repertoire: Latin music, European folk music, popular and classical themes arranged for two or more guitars. Provides experience in sight-reading and refines practice and memorization skills. Emphasizes stylistic interpretation and stage delivery. Ensemble for non-music majors.

Special Note: May be repeated for credit. New members: see instructor at the first class for section placement.

May Be Stacked With: MUS A409B

MUS A409B University Guitar Ensemble 2 Credits

Study and performance of traditional repertoire: Latin music, European folk music, and popular and classical themes arranged for two or more guitars. Provides experience in sight-reading and refines practice and memorization skills. Emphasizes stylistic interpretation and stage delivery. Ensemble for music majors.

Special Note: May be repeated seven times for credit. New members: see instructor at the first class for section placement.

May Be Stacked With: MUS A409A

MUS A421 Music in the Baroque Period 3 Credits

Musical style from 1600 to 1750. In-depth study of keyboard music, opera, oratorio and cantata, and instrumental music. Requires intensive listening and reading of music.

Special Note: BA music majors must first pass MUS 154 and the functional piano exam by jury before enrolling in this course.

Prerequisites: MUS A222 and MUS A232.

MUS A422 Music in the Classical Period 3 Credits

Musical style from 1720 to 1830. In-depth study of the music of pre-classic composers and Haydn, Mozart, and Beethoven. Requires intensive listening and reading of music.

Special Note: BA music majors must first pass MUS 154 and the functional piano exam by jury before enrolling in this course.

Prerequisites: MUS A222 and MUS A232.

MUS A423 Music in the Romantic Period 3 Credits

Musical style from 1820 to 1900. In-depth study of orchestral and choral music, opera, lieder, and music for piano. Requires intensive listening and reading of music.

Special Note: BA music majors must first pass MUS 154 and the functional piano exam by jury before enrolling in this course.

Prerequisites: MUS A222 and MUS A232.

MUS A424 Music in the 20th Century 3 Credits

Musical developments since 1900. In-depth study of serialism, neo-classicism, neo-Romanticism, expressionism, primitivism, minimalism, and styles since 1950. Requires intensive listening and reading of music.

Special Note: BA music majors must first pass MUS A154 and the functional piano exam by jury before enrolling in this course.

Prerequisites: MUS A222 and MUS A232.

MUS A431 Counterpoint 3 Credits

Study of the contrapuntal techniques of the 16th and 18th centuries. Features writing in appropriate vocal and instrumental forms.

Prerequisites: MUS A232.

MUS A432 Orchestration 3 Credits

Principles and practices of composing and transcribing music for various instrumental ensembles, including band and orchestra.

Prerequisites: MUS A232.

MUS A433 Choral Arranging 3 Credits

Principles and practices in transcribing, modifying and adapting pre-existing music for various choral ensembles with and without accompaniment.

Prerequisites: MUS A232 with a minimum grade of C.

MUS A461 Private Lessons 2 Credits

Continuation of MUS A362. Private music instruction in brass, guitar, organ, percussion, piano, strings, voice and woodwinds.

Special Note: In addition to lessons, students are required to attend a set number of department-approved recitals and/or concerts each semester.

Registration Restrictions: Departmental approval. Enrollment concurrent with appropriate master class.

Prerequisites: MUS A362 with a minimum grade of C.

MUS A462 Private Lessons 2 Credits

Continuation of MUS A461. Private music instruction in brass, guitar, organ, percussion, piano, strings, voice and woodwinds.

Special Note: In addition to lessons, students are required to attend a set number of department-approved recitals and/or concerts each semester.

Registration Restrictions: Departmental approval. Enrollment concurrent with appropriate master class.

Prerequisites: MUS A461 with a minimum grade of C.

MUS A466 String and Wind Master Class 1 Credit

Seminar in performance practice for string and wind players. Comparative analysis and discussion of string and wind literature to include close examination of their styles and periods (early Baroque through the 21st century). At least one performance required each semester.

Special Note: Mandatory each semester for string and wind majors; 4 credits minimum required for BA Music majors. May be repeated for a maximum of 8 credits.

Registration Restrictions: Departmental approval. Enrollment concurrent with appropriate level of juried private lessons. One of the following: MUS A161, A162, MUS A261, MUS A262, MUS A361, MUS A362, MUS A461 or MUS A462.

MUS A467 Piano Master Class 1 Credit

Seminar in performance practice for pianists. Comparative analysis and discussion of piano literature including close examination of its styles and periods (early Baroque through the 21st century). At least two performances required each semester.

Special Note: Mandatory each semester for BM Performance and BM Music Education Emphasis majors. Four semesters required for BA Music majors. May be repeated for a maximum of 8 credits.

Registration Restrictions: Departmental approval. Enrollment concurrent with appropriate level of juried private lessons: MUS A161, MUS A162, MUS A261, MUS A262, MUS A361, MUS A362, MUS A461 or MUS A462.

MUS A468 Voice Master Class 1 Credit

Seminar in performance practice for singers. Analysis, discussion and performance of solo vocal literature from early Baroque through to the 21st century. Weekly master classes, with at least two performances required for each topic.

Special Note: May be repeated for a maximum of 8 credits.

Registration Restrictions: Departmental approval. Enrollment concurrent with appropriate level of juried private lessons: MUS A161, MUS A162, MUS A261, MUS A262, MUS A361, MUS A362, MUS A461 or MUS A462.

MUS A469 Guitar Master Class 1 Credit

Designed to improve guitar performance through solo and duo performance experience in the classroom. Instruction in performance technique, stage presence, and correct stylistic interpretation. Development of critical pedagogical skills through discussions of fellow student and one's own performances. Comparative analysis and discussion of the literature, plucked instrument relatives and examination of its styles and periods (Renaissance through the 21st century). At least two performances required each semester.

Special Note: Mandatory each semester for guitar majors; 4 credits minimum required for BA music majors. May be repeated for a maximum of 8 credits.

Registration Restrictions: Departmental approval. Enrollment concurrent with appropriate level of juried private lessons. One of the following: MUS A161, MUS A162, MUS A261, MUS A262, MUS A361, MUS A362, MUS A461 or MUS A462.

MUS A603 Wind Ensemble Performance Projects 2 Credits

Development and implementation of standards based curricular performance projects for band. Students participate in University Wind Ensemble for lab experience. SN May be repeated for credit.

Registration Restrictions: Completion of baccalaureate degree in music and audition.

MUS A668A Methods for Teaching Music I, K-12 3 Credits

Provides students with the fundamentals of standards-based curriculum planning and assessment for the diverse student population in elementary classrooms. Includes an overview of the content areas typically taught in K-12 music curriculum. Integrates technology, literacy and education for special populations.

Special Note: Concurrent enrollment in EDFN A695 required.

Registration Restrictions: Departmental approval and admission to the MAT program required.

Prerequisites: EDFN A601 and EDFN A602 and EDFN A603.

Corequisites: EDFN A695.

MUS A668B Methods for Teaching Music II, K-12 **3 Credits**

Provides students with the opportunity to develop pedagogical content knowledge by connecting theoretical knowledge and understanding of human development and learning with both general principles of instruction and content-specific strategies for teaching music.

Special Note: Concurrent enrollment in EDFN A695 required.

Registration Restrictions: Departmental approval and admission to the MAT program required.

Prerequisites: MUS A668A.

Corequisites: EDFN A695.

Nursing (NURS)

Courses

NURS A101 Introduction to Nursing **2 Credits**

Provides an introduction to the nursing profession. Explores nursing history, current issues, roles and functions with special emphasis on communication skills and use of the nursing process as a method to provide systematic, holistic care for health needs of patients. Introduces the health-illness continuum and Maslow's Hierarchy of Needs as a foundation for prioritizing patient needs and nursing care.

NURS A120 Nursing Fundamentals **3 Credits**

Focuses on foundational nursing principles. Explores and utilizes nursing process as a method to identify, prioritize and address clients' basic needs. Focuses on healthy individuals and introduces concepts related to health disruptions. Emphasizes safe client-centered care in a collaborative healthcare environment for diverse individuals across the care continuum.

Registration Restrictions: Acceptance to first semester of Associate of Applied Science Nursing program.

Prerequisites: BIOL A111 with a minimum grade of C or concurrent enrollment and PSY A150 with a minimum grade of C or concurrent enrollment and (WRTG A111 with a minimum grade of C or concurrent enrollment or WRTG A1W with a minimum grade of C).

Corequisites: NURS A120L.

NURS A120L Nursing Fundamentals Laboratory **4 Credits**

Provides lab and client care learning experiences that allow students to apply fundamental principles and nursing skills. Supports development of skills that identify individual health needs and prioritization of nursing care in adults. Introduces nursing process with emphasis on developmentally appropriate and culturally sensitive nursing interventions. Focuses on predicted responses during a healthy state as well as beginning concepts related to health disruptions, and assisting patients toward health on the health-illness continuum.

Registration Restrictions: Acceptance to Associate of Applied Science Nursing Program.

Prerequisites: BIOL A111 with a minimum grade of C or concurrent enrollment and PSY A150 with a minimum grade of C or concurrent enrollment and (WRTG A111 with a minimum grade of C or concurrent enrollment or WRTG A1W with a minimum grade of C).

Corequisites: NURS A120.

NURS A125 Adult Nursing I **2 Credits**

Emphasizes the nursing process in providing care for adult patients experiencing chronic health disruptions that respond predictably to established healthcare regimens. Focuses on the pathophysiologic basis of disease, treatment options and nursing care based on stages of adult development. Includes specific emphasis on the aging adult.

Registration Restrictions: Current admission to second semester AAS nursing program.

Prerequisites: BIOL A112 with a minimum grade of C or concurrent enrollment and BIOL A240 with a minimum grade of C or concurrent enrollment and (NURS A120 with a minimum grade of C or NURS A127 with a minimum grade of C) and NURS A120L with a minimum grade of P and PSY A150 with a minimum grade of C.

Corequisites: NURS A125L.

NURS A125L Adult Nursing I Laboratory **4 Credits**

Clinical practicum for NURS A125. Focuses on use of pathophysiologic concepts, treatment options, and nursing process to care for adults with increasingly complex health needs in acute care settings. Incorporates diversity and developmental influences, client teaching, discharge planning, and prioritization of care using Maslow's Hierarchy of Needs.

Registration Restrictions: Current admission to second semester AAS nursing program.

Prerequisites: BIOL A112 with a minimum grade of C or concurrent enrollment and BIOL A240 with a minimum grade of C or concurrent enrollment and (NURS A120 with a minimum grade of C or NURS A127 with a minimum grade of C) and NURS A120L with a minimum grade of P and PSY A150 with a minimum grade of C.

Corequisites: NURS A125 AND NURS A180.

NURS A127 LPN to AAS Nursing Bridge **1 Credit**

Introduces the LPN to the role of the RN, building upon knowledge learned in a practical nursing program. Includes overview of fundamental nursing concepts, essential nursing skills and cultural competency. Focuses on the use of critical thinking in providing nursing care at the RN level. Emphasizes practice with analyzing assessment data, developing and prioritizing nursing diagnoses, using therapeutic communication, and developing and implementing patient teaching.

Registration Restrictions: Current Alaska LPN license and admission to UAA pre-nursing major.

Prerequisites: BIOL A112 with a minimum grade of C and BIOL A240 with a minimum grade of C and (WRTG A111 with a minimum grade of C or WRTG A1W with a minimum grade of C) and PSY A150 with a minimum grade of C.

NURS A180 Basic Nursing Pharmacology **3 Credits**

Provides an introduction to drug therapy with an emphasis on basic pharmacology principles, drug classifications and actions, correct dosages, methods of administration, and evaluation of patient responses across the lifespan. Nursing process is used to identify priorities for care of patients receiving specific medications.

Prerequisites: BIOL A111 with a minimum grade of C and BIOL A112 with a minimum grade of C or concurrent enrollment and BIOL A240 with a minimum grade of C or concurrent enrollment and WRTG A111 with a minimum grade of C and NURS A120 with a minimum grade of C and NURS A120L with a minimum grade of C and PSY A150 with a minimum grade of C.

NURS A203 Preparing for Nursing Program Success 3 Credits

Explores ideas, strategies and skills that will assist the student in successful completion of the nursing program and the building of a successful nursing career.

Registration Restrictions: Admission into either the UAA AAS or BS Nursing program or the permission of the program chair.

Crosslisted With: NS A203

NURS A220 Perinatal Nursing 3 Credits

Focuses on use of nursing process to provide health care for the childbearing woman, newborn, and family along the health-illness continuum. Content ranges from normal, low-risk perinatal care through nursing care for selected high-risk perinatal complications. Includes antepartum, intrapartum, postpartum, and low-risk neonatal nursing care with emphasis on developmental and cultural influences upon the health needs of the childbearing family and prioritizing using Maslow's Hierarchy of Needs.

Registration Restrictions: Current admission to third semester AAS nursing program. Completion of one social science elective with a minimum grade of C or concurrent enrollment.

Prerequisites: BIOL A112 with a minimum grade of C and BIOL A240 with a minimum grade of C and DN A203 with a minimum grade of C or concurrent enrollment and (WRTG A211 with a minimum grade of C or concurrent enrollment or WRTG A212 with a minimum grade of C or concurrent enrollment or WRTG A213 with a minimum grade of C or concurrent enrollment) and NURS A125 with a minimum grade of C and NURS A125L with a minimum grade of C and NURS A180 with a minimum grade of C.

Corequisites: NURS A220L AND NURS A221 AND NURS A222 AND NURS A222L.

NURS A220L Perinatal Nursing Laboratory 1 Credit

Provides clinical experiences to reinforce learning in NURS A220. Students use nursing process as they provide care for the childbearing women, newborn, and family along the health-illness continuum and prioritize using Maslow's Hierarchy of Needs. Clinical experiences occur in selected acute and ambulatory perinatal care settings with focus on providing developmentally and culturally sensitive nursing care for low-risk and selected high-risk perinatal patients and their families. Students are expected to demonstrate competence in performance of psychomotor and critical thinking skills while providing care for two or more patients, including discharge planning.

Registration Restrictions: Current admission as third semester AAS Nursing student. Completion of one social science elective with a minimum grade of C or concurrent enrollment.

Prerequisites: BIOL A112 with a minimum grade of C and BIOL A240 with a minimum grade of C and DN A203 with a minimum grade of C or concurrent enrollment and (WRTG A211 with a minimum grade of C or concurrent enrollment or WRTG A212 with a minimum grade of C or concurrent enrollment or WRTG A213 with a minimum grade of C or concurrent enrollment) and NURS A125 with a minimum grade of C and NURS A125L with a minimum grade of C and NURS A180 with a minimum grade of C.

Corequisites: NURS A220 AND NURS A221 AND NURS A222 AND NURS A222L.

NURS A221 Advanced Parenteral Therapy Laboratory 1 Credit

Lab-based course where students apply nursing process and knowledge of intravenous (IV) therapy, nutritional support, and pain management learned in previous nursing courses, to advanced concepts in the management of therapeutic interventions administered via the parenteral route. Emphasizes theoretical content and psychomotor skills related to advanced intravenous and parenteral therapies along the health-illness continuum, across the lifespan and applicable in multiple health care settings. Utilizes presentation, seminar, demonstration, supervised practice, return demonstration, and directed self-learning.

Registration Restrictions: Current admission to third semester AAS nursing program. Completion of one social science elective with a minimum grade of C or concurrent enrollment.

Prerequisites: BIOL A112 with a minimum grade of C and BIOL A240 with a minimum grade of C and DN A203 with a minimum grade of C or concurrent enrollment and (WRTG A211 with a minimum grade of C or concurrent enrollment or WRTG A212 with a minimum grade of C or concurrent enrollment or WRTG A213 with a minimum grade of C or concurrent enrollment) and NURS A125 with a minimum grade of C and NURS A125L with a minimum grade of C and NURS A180 with a minimum grade of C.

Corequisites: NURS A220 AND NURS A220L AND NURS A222 AND NURS A222L.

NURS A222 Pediatric Nursing 3 Credits

Focuses on the use of the critical thinking and nursing process in providing developmentally and culturally appropriate nursing care for children, along with their families, from birth through adolescence. Emphasizes normal growth and development as well as acute and chronic alterations in health and development along the health-illness continuum and prioritized according to Maslow's Hierarchy of Needs.

Registration Restrictions: Current admission to third semester AAS nursing program. Completion of one social science elective with a minimum grade of C or concurrent enrollment.

Prerequisites: BIOL A112 with a minimum grade of C and BIOL A240 with a minimum grade of C and DN A203 with a minimum grade of C or concurrent enrollment and (WRTG A211 with a minimum grade of C or concurrent enrollment or WRTG A212 with a minimum grade of C or concurrent enrollment or WRTG A213 with a minimum grade of C or concurrent enrollment) and NURS A125 with a minimum grade of C and NURS A125L with a minimum grade of C and NURS A180 with a minimum grade of C.

Corequisites: NURS A220 AND NURS A220L AND NURS A221 AND NURS A222L.

NURS A222L Pediatric Nursing Laboratory 1 Credit

Provides lab/clinical experiences to reinforce learning in NURS A222. Focuses on use of nursing process in providing developmentally and culturally appropriate nursing care for children and their families along the health-illness continuum and prioritized using Maslow's Hierarchy of Needs. Clinical experiences occur in selected acute and ambulatory pediatric care settings as well as in selected well-child settings. Students are expected to demonstrate competence in the performance of psychomotor skills as well as critical thinking in providing nursing care for children and families from birth through adolescence.

Registration Restrictions: Current admission to third semester AAS Nursing Program. Completion of one social science elective with a minimum grade of C or concurrent enrollment.

Prerequisites: BIOL A112 with a minimum grade of C and BIOL A240 with a minimum grade of C and DN A203 with a minimum grade of C or concurrent enrollment and (WRTG A211 with a minimum grade of C or concurrent enrollment or WRTG A212 with a minimum grade of C or concurrent enrollment or WRTG A213 with a minimum grade of C or concurrent enrollment) and NURS A125 with a minimum grade of C and NURS A125L with a minimum grade of C and NURS A180 with a minimum grade of C.

Corequisites: NURS A220 AND NURS A220L AND NURS A221 AND NURS A222.

NURS A225 Adult Nursing II 3 Credits

Focuses on nursing process and care of the adult medical-surgical patient with acute, complex and life-threatening disorders along the health-illness continuum and based on adult developmental considerations. Emphasis continues on the prioritization of health care needs and nursing interventions utilizing critical thinking and Maslow's Hierarchy of Needs.

Registration Restrictions: Current admission to fourth semester AAS Nursing Program. Complete one oral communication elective and one GER elective with minimum grade of C (may be concurrent). Complete one social science elective with minimum grade of C (prerequisite).

Prerequisites: NURS A220 with a minimum grade of C and NURS A220L with a minimum grade of C and NURS A221 with a minimum grade of C and NURS A222 with a minimum grade of C and NURS A222L with a minimum grade of C.

Corequisites: NURS A225L AND NURS A250 AND NURS A250L AND NURS A255.

NURS A225L Adult Nursing II Laboratory 3 Credits

Provides clinical learning experiences in care of the adult medical-surgical patient with acute, complex and life-threatening disorders along the health-illness continuum. Includes experiences in delegation and management of nursing care for small groups of patients.

Registration Restrictions: Current admission to fourth semester AAS Nursing Program. Complete one oral communication elective and one GER elective with minimum grade of C (may be concurrent). Complete one social science elective with minimum grade of C (prerequisite).

Prerequisites: NURS A220 with a minimum grade of C and NURS A220L with a minimum grade of C and NURS A221 with a minimum grade of C and NURS A222 with a minimum grade of C and NURS A222L with a minimum grade of C.

Corequisites: NURS A225 AND NURS A250 AND NURS A250L AND NURS A255.

NURS A250 Psychiatric Nursing 3 Credits

Focuses on the psychodynamics of the major mental illnesses and principles of psychiatric nursing across the lifespan. Seminar emphasizes the application of nursing process and Maslow's Hierarchy of Needs along with adapting communication strategies to facilitate therapeutic intervention with patients who are experiencing mental health needs across the health-illness continuum and at varying developmental stages.

Registration Restrictions: Current admission to fourth semester of AAS nursing program. Completion of one social science elective with a minimum grade of C, plus completion of one oral communication course and one additional GER course with minimum grade of C or concurrent enrollment.

Prerequisites: DN A203 with a minimum grade of C and NURS A220 with a minimum grade of C and NURS A220L with a minimum grade of P and NURS A221 with a minimum grade of C and NURS A222 with a minimum grade of C and NURS A222L with a minimum grade of P.

Corequisites: NURS A225 AND NURS A225L AND NURS A250L AND NURS A255.

NURS A250L Psychiatric Nursing Laboratory 1 Credit

Clinical practicum concurrent with NURS A250. Provides clinical experiences in care of the inpatient and outpatient psychiatric patients. Focuses on the application of nursing process and adapting communication strategies to facilitate therapeutic interventions with patients who are experiencing mental health needs across the health-illness continuum and at varying developmental stages. Maslow's Hierarchy of Needs is used in prioritizing nursing care.

Registration Restrictions: Current admission to fourth semester of AAS nursing program. Completion of one social science elective with a minimum grade of C. Completion of one oral communication course and one additional GER course with minimum grade of C or concurrent enrollment.

Prerequisites: DN A203 with a minimum grade of C and NURS A220 with a minimum grade of C and NURS A220L with a minimum grade of P and NURS A221 with a minimum grade of C and NURS A222 with a minimum grade of C and NURS A222L with a minimum grade of P.

Corequisites: NURS A225 AND NURS A225L AND NURS A250 AND NURS A255.

NURS A255 Staff Nurse: Legal, Ethical, and Organizational Issues 1 Credit

Seminar course which examines the legal, ethical, and professional issues encountered in the practice of a registered nurse. Explores the role of the staff nurse within health care organizations. Examines professional nursing issues and knowledge necessary to function effectively in the staff nurse role and on health care teams. Includes legal limits and regulation of nursing practice along with trends in nursing.

Registration Restrictions: Current admission as fourth semester AAS Nursing student. Must have completed one oral communication elective and one GER elective (or be concurrently enrolled). Complete one social science elective as a prerequisite.

Prerequisites: NURS A220 with a minimum grade of C and NURS A220L with a minimum grade of C and NURS A221 with a minimum grade of C and NURS A222 with a minimum grade of C and NURS A222L with a minimum grade of C.

Corequisites: NURS A225 AND NURS A225L AND NURS A250 AND NURS A250L.

NURS A295 Intensive Clinical Practicum 2 Credits

Concentrated clinical work to familiarize graduating nurses with clinical registered nurse responsibilities.

Special Note: Two-week duration. 32 hours per week with preceptor and 2 hours per week in seminar. Some lifting may be required.

Registration Restrictions: Good physical health.

Prerequisites: NURS A220 with a minimum grade of C and NURS A220L with a minimum grade of C and NURS A221 with a minimum grade of C and NURS A222 with a minimum grade of C and NURS A222L with a minimum grade of C.

Nursing Doctorate (ND)

Nursing Science Graduate (NSG)

Courses

NSG A601 Advanced Pathophysiology 3 Credits

Provides for advanced analysis and critical review of autonomy, advanced pathophysiology and genetics/genomics of disease processes that result in abnormal functioning of the human body across the lifespan. Fosters refinement of critical thinking to interpret pathophysiologic changes that result in clinical manifestations of illness.

Registration Restrictions: Graduate standing or faculty permission

NSG A601A Genetics and Genomics in Advanced Pathophysiology 1 Credit

Develops expertise in abnormal physiology building upon students' understanding of pathophysiology. Expands knowledge of genetic influence on disease, inheritance patterns and genetic mutations across the lifespan.

Registration Restrictions: Admission to graduate nursing program

NSG A602 Advanced Health Assessment in Primary Care 4 Credits

Provides a systematic approach to advanced physical assessment and differential diagnoses. Develops advanced skills building on basic assessment knowledge and documentation. Incorporates individual, psychological, sociocultural, developmental, spiritual and genetic components of health.

Registration Restrictions: Admission to graduate nursing program

NSG A610 Pharmacology for Primary Care 3 Credits

Advanced level pharmacology course that assists health care professionals in selecting, prescribing and monitoring of pharmaceutical agents utilized in the primary care setting. Legend drugs, over-the-counter agents and some complementary therapeutics will be discussed. Emphasis is on the pharmacodynamics of medications most commonly prescribed.

Registration Restrictions: Admission to graduate nursing program and current license to practice as a registered nurse in the state of Alaska.

NSG A610A Pharmacology for Primary Care: Special Topics 1 Credit

Develops expertise in applied pharmacology, preparing providers to select, prescribe and monitor pharmaceutical agents used in primary and psychiatric care settings with a focus on pharmacogenetics and pharmacogenomics. Explores health promotion as it pertains to prescribing pharmaceutical agents.

Registration Restrictions: Admission to graduate nursing program

NSG A611 Psychopharmacology for Advanced Nursing 3 Credits

Develops expertise in applied psychopharmacology, preparing providers to select, prescribe and monitor pharmaceutical agents used in primary and psychiatric care settings.

Registration Restrictions: Admission to graduate nursing program

NSG A613 Advanced Practice Informatics 2 Credits

Provides an evidence-based foundation in informatics and technology for advanced practice. Emphasizes evolving technologies, health communications and clinical information systems. Evaluates impact of technology on safety, access to care and quality of health care outcomes.

Registration Restrictions: Admission to graduate nursing program

NSG A614 Advanced Practice Ethics and Law 2 Credits

Provides a foundation in ethics and law for advanced practice. Analyzes ethical theories and principles and their application to decision making in practice. Explores the interface between ethical decision making, legal and regulatory requirements, and their effects on the conduct of research, the influence of technology, and access to care.

Registration Restrictions: Admission to graduate nursing program

NSG A615 Health Services Organization and Finance 4 Credits

Synthesizes organizational theories in the health care context. Develops advanced practice role in complex health care organizations. Plans the design, implementation and evaluation of quality health care practices applying principles of finance, quality outcomes and cost analysis. Implements strategic findings for organizational change, system change and positive population health outcomes.

Registration Restrictions: Admission to graduate nursing program

NSG A618 Role Development in Advanced Nursing 2 Credits

Enhances knowledge of the many roles of nursing in health care and educational settings. Incorporates the American Association of Colleges of Nursing Master's Essentials into the curriculum and discusses contemporary nursing issues.

Registration Restrictions: Admission to graduate nursing program.

NSG A618A Advanced Nursing Leadership 2 Credits

Enhances leadership skills of advance practice nurses to guide health care improvement, systems change and safety. Develops collaborative knowledge and practice improvement with an emphasis on population health management.

Registration Restrictions: Admission to graduate nursing program

NSG A619 Nursing Health Policy 2 Credits

Analyzes the procedures by which governmental and private agencies make decisions that affect the health of populations groups. Explores the influence of lay, professional and special interest groups in relation to legislation, allocation of resources and the setting of health priorities. Examines current issues in health policy, focusing on how policy is changed, interpreted and implemented.

Registration Restrictions: Admission to graduate nursing program.

NSG A619A Health Economics 2 Credits

Critically appraises health system economics and explores its impact on health outcomes. Applies advocacy and leadership strategies to analyze and implement policies to promote positive societal and economic outcomes.

Registration Restrictions: Admission to graduate nursing program

NSG A621 Knowledge Development for Advanced Nursing Practice 3 Credits

Integrates theory and clinical evidence from nursing and other disciplines to explain and predict human responses to health and illness. Explores multiple paradigms of knowledge development. Critically analyzes and explores translation of theory into knowledge to improve practice, clinical decision making and health.

Registration Restrictions: Admission to graduate nursing program

NSG A623 Transcultural Nursing 3 Credits

Analyzes socio-cultural factors that influence health, illness, and health-related behaviors, including cultural beliefs, values, and lifestyles. Explores the historical development of the major non-western and western health systems with implications for nursing practice. Places health-related behaviors within a cultural context and applies the models and research findings to culturally sensitive approaches to clients and families seeking professional nursing care. Describes areas of transcultural nursing research and evidenced-based practice.

Special Note: Students may take NS A423 or NS A623 for credit, but not both.

Registration Restrictions: RN license to practice in the state of Alaska or instructor permission. Graduate standing.

May Be Stacked With: NS A423

NSG A627 Practice Inquiry I: The Nature of Evidence 3 Credits

Explores the nature of evidence and appraises scholarly evidence-based projects focusing on problems of practice within specific health care populations. Employs research critiques, evidence tables and integrative evidence reviews.

Registration Restrictions: Graduate standing or instructor permission, and grade of C or better in undergraduate research/statistics course within the past five years

Prerequisites: NSG A613 with a minimum grade of B and NSG A621 with a minimum grade of B.

NSG A628 Practice Inquiry II: Design and Methods 3 Credits

Explores advanced research design and methods. Develops acquisition of knowledge and skills appropriate to an advanced evidence-based clinical inquiry project, including conceptual, design and methodological technique.

Registration Restrictions: Admission to graduate nursing program. Baccalaureate to Doctor of Nursing Practice students must take NSG A627 prior to NSG A628.

NSG A629 Practice Inquiry III: Proposal Development 2 Credits

Operationalizes clinical evidence-based practice project. Refines project to incorporate appropriate conceptual frameworks, designs and methods. Prepares written project proposal to address significant clinical, health policy, leadership or advanced nursing practice problem relevant to stakeholders.

Registration Restrictions: Admission to graduate nursing program

Prerequisites: NSG A628 with a minimum grade of B.

NSG A633 Statistics for Advanced Practice 3 Credits

Explores bio-statistical methods used in nursing and health care research for clinical decision making, evidence-based practice, and program and policy evaluations. Emphasizes selection of appropriate statistical tests and interpretation and critique of data related to clinical practice and program assessment. Focuses on conceptual understanding rather than mathematical computation.

Registration Restrictions: Admission to graduate nursing program or graduate dietetics program

NSG A634 Epidemiology for Advanced Practice 2 Credits

Explores epidemiologic techniques and methods. Analyzes clinical data sets. Critiques epidemiological study designs in clinical scenarios. Assesses causality and risk in clinical situations. Analyzes and interprets screening and diagnostic tests for advanced practice. Evaluates clinical practice using epidemiologic methods and statistical process controls to improve patient outcomes.

Registration Restrictions: Admission to graduate nursing program

Prerequisites: ND A633 with a minimum grade of B.

NSG A637 Data Analysis: Qualitative 1 Credit

Emphasizes qualitative research principles and methods of analysis. Applies qualitative analytic methods to clinical data sets. Focuses on ensuring validity, credibility and dependability. Facilitates interpretation and dissemination of qualitative research study findings.

Registration Restrictions: Admission to graduate nursing program

Prerequisites: NSG A628 with a minimum grade of B.

NSG A638 Data Analysis: Quantitative 1 Credit

Introduces quantitative data analysis using the Statistical Package for the Social Sciences (SPSS) computer program. Focuses on creating a database, evaluating data for entry errors, exploring data for statistical assumptions and computing descriptive and inferential statistics.

Registration Restrictions: Admission to graduate nursing program

Prerequisites: NSG A628 with a minimum grade of B.

NSG A640 Teaching and Learning in the Professional Context 3 Credits

Explores the role and expected competencies of the working professional as educator. Examines continuing professional education and addresses incorporation of adult learning theory and pedagogy into teaching practice for a variety of teaching environments within the professions. Focuses on planning lifelong learning and professional development for the nurse or other educator in the professions.

Special Note: Graduate students from other disciplines may take the course on a space-available basis and with instructor permission; coursework will be individualized to reflect the learner's profession of origin.

Registration Restrictions: Graduate standing in nursing or instructor permission

NSG A641 Developing Curriculum for Nursing and Other Professions 3 Credits

Applies adult learning theory and pedagogy to design and develops curriculum with an emphasis on learner-centered instruction within the conceptual framework of nursing and other professions. Applies prominent design frameworks to ensure high-quality learner experience and achievement of learning objectives. Examines internal and external factors that drive or impact the curriculum.

Special Note: Graduate students from other disciplines may take the course on a space-available basis and with instructor permission; coursework will be individualized to reflect the learner's profession of origin.

Registration Restrictions: Graduate standing in nursing or instructor permission

NSG A643 Course and Curriculum Evaluation for Professionals 4 Credits

Focuses on application of evaluation concepts, principles and evidence-based practices to develop appropriate metrics that assess learning outcomes, learner experiences, and instructional effectiveness in nursing and other professions. Applies professional and design quality standards and metrics to assess key educational components such as alignment, effectiveness and contextuality of the curriculum. Appraises teaching practice, cultural sensitivity and the overall learner experience. Examines evaluation at both the course and program levels.

Special Note: Graduate students from other disciplines may take the course on a space-available basis and with instructor permission; coursework will be individualized to reflect the learner's profession of origin.

Registration Restrictions: Graduate standing in nursing or instructor permission

NSG A644 Technology for Learning and Collaboration 2 Credits

Acquires knowledge and understanding of methods and strategies for the incorporation of appropriate technology in continuing and professional education. Applies technological strategies to the development of learning units, including a rationale for the selection of technology. Incorporates discussion of relevance and staying abreast of current trends in nursing and other professional contexts.

Special Note: Graduate students from other disciplines may take this course on a space-available basis and with instructor permission; coursework will be individualized to reflect the learner's profession of origin.

Registration Restrictions: Graduate standing in nursing or instructor permission.

Prerequisites: NSG A640 with a minimum grade of B and NSG A641 with a minimum grade of B.

NSG A647 Evidence-Based Practicum for Nursing 3 Credits

Applies leadership skills and evidence-based practice in a variety of nursing education or administrative settings. Develops and implements an evidence-based project. Participates in seminar to identify, analyze and solve education or administrative problems related to practicum.

Registration Restrictions: Graduate standing in nursing or instructor permission. Prior completion of required core and specialty courses with grade of B.

NSG A659 Integrative Health: Complementary/Alternative Methods of Healing 3 Credits

Explores the various philosophies, theoretical perspectives, concepts and contextual processes of human health and healing. Research findings based in traditional and emerging models of complementary/alternative healing will be critically reviewed. Students will explore and critique a range of healing arts relevant to advanced nursing practice with a holistic viewpoint.

Registration Restrictions: Nursing major or instructor permission; graduate standing

NSG A660 Family Nurse Practitioner I 5 Credits

Develops advanced skills needed in primary care of pediatric patients and developing families, including advanced history and physical assessment skills for all pediatric age groups. Focuses on acquisition of skills and diagnostic evaluation methods required for management of pediatric patients and families. Explores influence of genetics and genomics on health status.

Registration Restrictions: Acceptance into the family nurse practitioner track.

Prerequisites: NSG A602 with a minimum grade of B.

NSG A661 Family Nurse Practitioner II 4 Credits

Develops advanced skills needed in primary care of female patients and their families, including history and physical assessment skills for women's health throughout the lifespan. Clinical focus and experience include acquisition of skills and diagnostic evaluation methods required for management of women's health and obstetric patients. Explores influence of genetics and genomics on women's health status.

Registration Restrictions: Acceptance into the family nurse practitioner track.

Prerequisites: NSG A602 with a minimum grade of B.

NSG A662 Family Nurse Practitioner III 5 Credits

Continues preparation for advanced nursing practice. Concentrates on assessment, diagnosis, evidence-based management or the referral of adult and geriatric clients. Focuses on acute and chronic illnesses in adults but may include care of clients throughout the lifespan. Incorporates influence of genetics and genomics on health status.

Prerequisites: NSG A661 with a minimum grade of B.

NSG A663 Family Nurse Practitioner IV 6 Credits

Capstone course in preparation for family nurse practitioner role. Intensive clinical practicum incorporates professional and practice principles into primary care role. Focus includes common procedures and diagnostics as well as the influence of genetics and genomics on health status of clients throughout the lifespan.

Prerequisites: NSG A662 with a minimum grade of B.

NSG A670 Advanced Practice Psychiatric and Mental Health Nursing I 5 Credits

Develops advanced skills needed for the psychiatric mental health nurse practitioner role. Focuses on acquisition of knowledge related to assessment, diagnosis, treatment and evaluation. Emphasizes management of individuals across the lifespan at risk of/for experiencing mental health problems.

Registration Restrictions: Graduate standing with acceptance into the psychiatric mental health nursing practice track

Prerequisites: NSG A602 with a minimum grade of B.

NSG A671 Advanced Practice Psychiatric and Mental Health Nursing II 5 Credits

Develops, applies and adapts advanced skills for practice as a psychiatric mental health nurse practitioner caring for families and groups. Focuses on acquisition of clinical knowledge and skills for evidence-based practice and promotion of mental health.

Registration Restrictions: Graduate standing with acceptance into the psychiatric mental health nursing practice track of the Doctor of Nursing Practice program

Prerequisites: NSG A670 with a minimum grade of B.

NSG A672 Advanced Practice Psychiatric and Mental Health Nursing III 5 Credits

Introduces the consultant/liaison role in organizational settings. Analyzes organizational approaches to plan, implement and evaluate population-focused mental health services. Identifies and evaluates fiscal and social policies, community resources, and research findings.

Registration Restrictions: Graduate standing with acceptance into the psychiatric mental health nursing practice track

Prerequisites: NSG A671 with a minimum grade of B.

NSG A673 Advanced Practice Psychiatric and Mental Health Nursing IV 5 Credits

Capstone course in preparation for psychiatric mental health practitioner role. Intensive clinical practicum provides context for integration, synthesis and application of theory, research and clinical findings to facilitate mental and functional well-being in individuals, families and groups throughout the lifespan. Includes seminar to explore advance practice issues.

Registration Restrictions: Graduate standing with acceptance into the psychiatric mental health nursing practice track

Prerequisites: NSG A672 with a minimum grade of B.

NSG A683 Clinical Immersion 2-3 Credits

Emphasizes care of unique, diverse and/or underserved populations. Analyzes socio-cultural factors that influence health, illness and health-related behaviors. The influence of genetics and genomics on health status is considered in chosen populations. May include focused project implementation.

Special Note: May be repeated for a maximum of 3 credits.

Registration Restrictions: Admission to Doctor of Nursing Practice

NSG A684 Clinical Concentration 2-4 Credits

Provides final integration of advanced practice skills and evidence-based knowledge in a practice environment of interest to the student. May include focused project implementation.

Special Note: May be repeated for a maximum of 4 credits.

Registration Restrictions: Admission to Doctor of Nursing Practice

NSG A696A Practice Inquiry IV A: Capstone Project 2 Credits

Develops evidence-based practice project in a clinical setting reflecting a topic of current concern within the specialty.

Registration Restrictions: Admission to Doctor of Nursing Practice

NSG A696B Practice Inquiry IV B: Capstone Project 2 Credits

Implements evidence-based practice project in a clinical setting reflecting a topic of current concern within the specialty.

Registration Restrictions: Admission to Doctor of Nursing Practice

Prerequisites: NSG A696A with a minimum grade of B.

NSG A696C Practice Inquiry IV C: Capstone Project 2 Credits

Collects and analyzes data for evidence-based practice project to generate findings and conclusions related to clinical practice. Defends capstone project and disseminates findings.

Registration Restrictions: Admission to Doctor of Nursing Practice

Prerequisites: NSG A696B with a minimum grade of B.

Nursing Science (NS)

Courses

NS A203 Preparing for Nursing Program Success 3 Credits

Explores ideas, strategies and skills that will assist the student in successful completion of the nursing program and the building of a successful nursing career.

Registration Restrictions: Admission into either the UAA AAS or BS Nursing program or permission of the program chair.

Crosslisted With: NURS A203

NS A204 Technology and Nursing Informatics 3 Credits

Concepts and applications of nursing informatics in health care organizations. Evaluate the impact of technology on nursing practice and on client education, including privacy and security issues. Explore electronic resources available to clients and nurses.

Registration Restrictions: Admission to Clinical Nursing Major or RN licensure in the State of Alaska.

Prerequisites: (PHIL A101 or PHIL A201) or ENGL A120.

Corequisites: NS A216 AND NS A300.

NS A205 Nursing Informatics 3 Credits

Concepts and applications of nursing informatics in health care organizations. Explore electronic resources available to clients and nurses.

Registration Restrictions: Admission to clinical major and/or RN licensure in the state of Alaska.

NS A216 Pathophysiology 4 Credits

Basic conceptual study of disease and the resultant abnormal functioning. Key concepts are utilized to assist students to develop knowledge and understanding of basic physiologic mechanisms of and responses to disease.

Special Note: Offered fall and spring semesters.

Registration Restrictions: Admission to clinical nursing major or RN licensure in state of Alaska

Prerequisites: BIOL A112 with a minimum grade of C and CHEM A104 with a minimum grade of C and CHEM A104L with a minimum grade of C.

Corequisites: NS A204 AND NS A300.

NS A300 Foundations of Nursing I: Roles, Processes, and Trends 3 Credits

Introduces concepts, theories and processes that inform the discipline of nursing, ethical and legal standards that govern nursing practice, and intellectual, interpersonal and technical competencies required of the professional nurse. Examines the development of professional nursing, nursing roles and practice environments, and contemporary issues and trends.

Prerequisites: PHIL A101 with a minimum grade of C or PHIL A201 with a minimum grade of C.

Corequisites: NS A204 AND NS A216.

NS A303 Foundations of Nursing Practice: Therapeutics 3 Credits

Focuses on systematic use of the nursing process to care for individuals in a variety of settings. Emphasizes identifying physiological and psychosocial alterations in health patterns and basic therapeutic nursing interventions.

Special Note: Offered fall, spring and summer semesters.

Prerequisites: NS A204 with a minimum grade of C and NS A216 with a minimum grade of C and NS A300 with a minimum grade of C.

Corequisites: NS A303L AND NS A309.

NS A303L Foundations of Nursing Practice: Therapeutics Laboratory 4.5 Credits

Utilizes the nursing process and the performance of therapeutic nursing interventions in the laboratory and clinical settings.

Prerequisites: NS A204 with a minimum grade of C and NS A216 with a minimum grade of C and NS A300 with a minimum grade of C.

Corequisites: NS A303 AND NS A309.

NS A305 Health Assessment of Individuals 2 Credits

Focuses on health assessment across the lifespan with an emphasis on interviewing and data collection, interpretation and documentation. Provides the skills for developing a systematic approach to performing a health history and physical examination.

Special Note: Offered only in Fall semester.

Registration Restrictions: Admission to the clinical major and RN licensure in the state of Alaska

Prerequisites: NS A205 or concurrent enrollment.

Corequisites: NS A305L.

NS A305L Health Assessment of Individuals Laboratory 1 Credit

Laboratory experience to apply knowledge and skills introduced in NS A305.

Registration Restrictions: Admission to clinical major and RN licensure in the state of Alaska.

Prerequisites: NS A205 or concurrent enrollment.

Corequisites: NS A305.

NS A307 Foundations of Nursing Practice: Health Assessment Theory 1 Credit

Develops the knowledge and skills necessary to perform an adult health assessment. Emphasizes integration of the nursing process in patient-centered health assessments, including risk assessment and reduction. Uses a variety of learning techniques to teach physical, psychological, sociocultural and spiritual approaches to health assessment.

Prerequisites: NS A205 with a minimum grade of C and NS A216 with a minimum grade of C and NS A300 with a minimum grade of C and DN A203 with a minimum grade of C.

Corequisites: NS A303 AND NS A303L AND NS A307L AND NS A309.

NS A307L Foundations of Nursing Practice: Health Assessment Laboratory 2 Credits

Develops the knowledge and skills necessary to perform an adult health assessment. Emphasizes integration of the nursing process in patient-centered health assessments, including risk assessment and reduction. Uses a variety of techniques to teach physical, psychological, sociocultural and spiritual approaches to health assessment.

Prerequisites: NS A205 with a minimum grade of C and NS A216 with a minimum grade of C and NS A305 with a minimum grade of C and NS A305L with a minimum grade of P and NS A308 with a minimum grade of C and DN A203 with a minimum grade of C.

Corequisites: NS A303 AND NS A303L AND NS A307 AND NS A309.

NS A308 Dimensions of Professional Nursing Practice 3 Credits

Facilitates the RN student's return to school to the baccalaureate nursing program. Introduces the theories, concepts, roles, and competencies relevant to professional nursing practice. The history of nursing provides the context for exploring the evolution of nursing as a profession. Examines current social, political, and legal issues and trends in health care and their implications for nursing practice and the RN student's goals for professional development.

Prerequisites: NS A204.

NS A309 Pharmacology in Nursing 3 Credits

In-depth consideration of the use of prescription and non-prescription drugs by individuals at varying developmental levels and with differing health status. Within the context of the nursing process, students develop the knowledge and skills needed to safely administer drugs, to assist clients to develop decision-making skills to enable independent management of drug regimens, to evaluate clients' responses to drug therapy, and to prevent and minimize toxicity.

Registration Restrictions: Admission to BS, Nursing Science major, or RN licensure in State of Alaska.

Prerequisites: NS A204 with a minimum grade of C and NS A216 with a minimum grade of C and NS A300 with a minimum grade of C.

NS A313 Health Disruptions I 3 Credits

Introduces episodic health disruptions occurring across the lifespan to include collaborative care and nursing management. Nursing therapeutics focus on nursing management of the individual and the family within an acute care setting.

Prerequisites: NS A204 with a minimum grade of C and NS A216 with a minimum grade of C and NS A300 with a minimum grade of C and NS A303 with a minimum grade of C and NS A303L with a minimum grade of P and NS A307 with a minimum grade of C and NS A307L with a minimum grade of C and NS A309 with a minimum grade of C.

Corequisites: NS A313L.

NS A313L Health Disruptions I Laboratory 3 Credits

Introduces episodic health disruptions occurring across the lifespan to include collaborative care and nursing management. Emphasizes psychomotor competencies associated with clinical conditions in the clinical setting. Focuses on nursing management of the individual and the family within the acute care setting.

Prerequisites: NS A303 with a minimum grade of C and NS A303L with a minimum grade of P and NS A307 with a minimum grade of C and NS A307L with a minimum grade of C and NS A309 with a minimum grade of C.

Corequisites: NS A313.

NS A314 Health I for Registered Nurses 2 Credits

Emphasizes health promotion, illness prevention, and health protection strategies for individuals and families across the lifespan to achieve and maintain healthy lifestyles and self-management of health. Introduces concepts of community health nursing, epidemiology, and injury prevention.

Special Note: Offered only in Spring semester.

Registration Restrictions: Admission to the clinical major and RN licensure in the state of Alaska.

Prerequisites: NS A205 with a minimum grade of C and NS A308 with a minimum grade of C.

Corequisites: NS A314L AND NS A417.

NS A314L Health I for Registered Nurses Laboratory 2 Credits

Provides clinical experience to build skills and reinforce student learning in NS A314.

Special Note: Offered only in Spring semester.

Registration Restrictions: Admission to the clinical major and RN licensure in the state of Alaska.

Prerequisites: NS A205 with a minimum grade of C and NS A308 with a minimum grade of C.

Corequisites: NS A314.

NS A315 Health I: Nursing Therapeutics 3 Credits

Emphasizes health states and risk factors amenable to health promotion and illness prevention efforts. Focuses on achieving and maintaining healthy lifestyles as well as self-management of health in individuals and families across the lifespan.

Registration Restrictions: BS Nursing Science majors only.

Prerequisites: NS A204 with a minimum grade of C and NS A216 with a minimum grade of C and NS A300 with a minimum grade of C and NS A303 with a minimum grade of C and NS A303L with a minimum grade of P and NS A309 with a minimum grade of C and NS A313 with a minimum grade of C and NS A313L with a minimum grade of P.

Corequisites: NS A315L.

NS A315L Health I: Nursing Therapeutics Laboratory 3 Credits

Provides clinical experience to build skills and reinforce student learning in NS A315.

Registration Restrictions: BS Nursing Science majors only

Prerequisites: NS A204 with a minimum grade of C and NS A216 with a minimum grade of C and NS A300 with a minimum grade of C and NS A303 with a minimum grade of C and NS A303L with a minimum grade of P and NS A309 with a minimum grade of C and NS A313 with a minimum grade of C and NS A313L with a minimum grade of P.

Corequisites: NS A315.

NS A400 Nursing Research 3 Credits

Introduction to research methods in nursing and health care. Emphasis on identification of researchable questions, problem formulation, research design, data collection, and analysis. Focus on the role of the professional nurse prepared at the baccalaureate level and on strategies for the utilization of research findings in clinical practice.

Registration Restrictions: Prior completion of a statistics course.

Prerequisites: NS A303 with a minimum grade of C and NS A303L with a minimum grade of P and NS A313 with a minimum grade of C and NS A313L with a minimum grade of P and NS A315 with a minimum grade of C and NS A315L with a minimum grade of P and PHIL A302 with a minimum grade of C.

NS A401 Health Disruptions II 3 Credits

Emphasis on episodic health disruptions in specialty-focused care. Nursing therapeutics focus on care of individuals, families and environments.

Prerequisites: NS A313 with a minimum grade of C and NS A313L with a minimum grade of P and NS A315 with a minimum grade of C and NS A315L with a minimum grade of P.

Corequisites: NS A401L.

NS A401L Health Disruptions II Laboratory 2.5 Credits

Provides clinical experience to build skills and reinforce student learning in NS A401.

Prerequisites: NS A313 with a minimum grade of C and NS A313L with a minimum grade of P and NS A315 with a minimum grade of C and NS A315L with a minimum grade of P.

Corequisites: NS A401.

NS A406 Nursing Therapeutics in Complex Health Disruptions 2.5 Credits

Emphasizes health disruptions with complex pathophysiology and/or psychological adjustments of clients of all ages and their families. Nursing management includes a high level of collaboration with other health care providers and agencies utilizing previously learned nursing therapeutics.

Corequisites: NS A400 AND NS A401 AND NS A401L AND NS A406L.

NS A406L Nursing Therapeutics in Complex Health Disruptions Laboratory 2.5 Credits

Provides clinical experience to build skills and reinforce student learning in NS A406.

Prerequisites: NS A401 with a minimum grade of C and NS A401L with a minimum grade of P.

Corequisites: NS A406.

NS A411 Population Health Integrative Capstone 3 Credits

Focuses on the role of the nurse in care of populations and/or vulnerable groups. Prepares students to conduct applied research to complete a Population Health Integrative Capstone project.

Registration Restrictions: Completion of all Tier 1 GER (basic college-level skills) courses and senior standing

Prerequisites: NS A400 with a minimum grade of C and NS A401 with a minimum grade of C and NS A401L with a minimum grade of P and NS A406 with a minimum grade of C and NS A406L with a minimum grade of P.

Corequisites: NS A411L.

Attributes: UAA Integrative Capstone GER.

NS A411L Population Health Integrative Capstone Laboratory 2.5 Credits

Clinical experience and fieldwork to build skills and reinforce student learning in NS A411 Population Health Integrative Capstone project.

Registration Restrictions: Admission to the BS in Nursing Science (either pre-licensure or RN-BS option)

Prerequisites: NS A400 with a minimum grade of C and NS A401 with a minimum grade of C and NS A401L with a minimum grade of P and NS A406 with a minimum grade of C and NS A406L with a minimum grade of P.

Corequisites: NS A411.

NS A415 Nursing Management and Legal Perspectives 4 Credits

Theories of management and organizations for basic students in relation to health care delivery systems. Emphasis is on the role of the professional nurse in health care organizations. Provides an overview of skills and techniques used for effective leadership and management of health care services. Exploration of legal implications and perspectives in nursing practice.

Prerequisites: NS A313 with a minimum grade of C and NS A315 with a minimum grade of C.

NS A416 Concentration in Clinical Nursing 0.5 Credits

Facilitates the integration and synthesis of knowledge basic to a beginning professional level of nursing practice. A major emphasis upon analyzing and evaluating issues arising in the practice setting.

Prerequisites: NS A400 with a minimum grade of C and NS A401 with a minimum grade of C and NS A401L with a minimum grade of P and NS A406 with a minimum grade of C and NS A406L with a minimum grade of P and NS A411 with a minimum grade of C and NS A411L with a minimum grade of P and NS A415 with a minimum grade of C.

Corequisites: NS A416L.

NS A416L Concentration in Clinical Nursing Lab 3.5 Credits

Application of clinical skills acquired throughout the BS Nursing program in a clinical setting incorporating research, management, and theory in delivering nursing care to individuals, families, and populations.

Prerequisites: NS A400 with a minimum grade of C and NS A401 with a minimum grade of C and NS A401L with a minimum grade of P and NS A406 with a minimum grade of C and NS A406L with a minimum grade of P and NS A411 with a minimum grade of C and NS A411L with a minimum grade of P and NS A415 with a minimum grade of C.

Corequisites: NS A416.

NS A417 Management in Nursing 3 Credits

Explores theories of management in relation to health care delivery systems. Discusses strategies and techniques for effective leadership and management in health care environments. Synthesizes and integrates knowledge and skills gained from clinical practice into theoretical context.

Special Note: Offered only in Spring semester.

Registration Restrictions: RN licensure in state of Alaska.

Prerequisites: NS A305 and NS A308.

Corequisites: NS A314 AND NS A314L.

NS A420 Caring for Individuals with Intellectual and Developmental Disabilities 3 Credits

Introduces dynamics of nursing supports for individuals experiencing intellectual and/or developmental disabilities (IDD). Reviews the history of IDD in the United States, common health and psychosocial issues for this population, and barriers to health care; provides strategies to assess needs, plan appropriate care, and advocate for elimination of healthcare barriers.

Registration Restrictions: Enrollment in the School of Nursing or departmental approval.

Prerequisites: NS A204 with a minimum grade of C and NS A216 with a minimum grade of C and NS A300 with a minimum grade of C.

NS A422 Management of the Critically Ill Adult 3 Credits

Applies nursing process to the care of adults in the critical care environment. Emphasizes integration of physical assessment and physiological monitoring to diagnose needs and plan interventions for critically ill adult patients.

Registration Restrictions: Prerequisites or current RN licensure

Prerequisites: NS A406 with a minimum grade of C and NS A406L with a minimum grade of P.

NS A423 Transcultural Nursing 3 Credits

Examines socio-cultural factors that influence health, illness, and health-related behaviors, including cultural beliefs, values, and lifestyles. Explores the historical development of the major non-western and western health systems with implications for nursing practice. Places health-related behaviors within a cultural context and applies the elements of a culturally sensitive approach to clients seeking professional nursing care services.

Special Note: Not available for credit to students who have completed NSG A623.

Registration Restrictions: RN license to practice in the state of Alaska, enrolled in baccalaureate program or instructor permission.

May Be Stacked With: NSG A623

Prerequisites: NS A315 with a minimum grade of C and NS A315L with a minimum grade of P.

NS A424 Issues in Women's Health 3 Credits

Explores current issues, research, and controversies affecting women's health with a focus on health promotion and maintenance. Addresses life cycle issues, special needs, unique populations and advocacy.

Registration Restrictions: If prerequisites not met, then RN licensure in the state of Alaska.

Prerequisites: NS A300 with a minimum grade of C and NS A303 with a minimum grade of C and NS A303L with a minimum grade of P and NS A309 with a minimum grade of C and NS A313 with a minimum grade of C and NS A313L with a minimum grade of P and NS A315 with a minimum grade of C and NS A315L with a minimum grade of P.

NS A426 Critical Care Concepts in Acute Care Settings 3 Credits

Prepares experienced, registered nurses for entry-level practice in critical care and provides opportunities to analyze past and current clinical situations and adapt concepts used in critical care settings to their current practice. Emphasis on developing an ability to predict and project events for clients who are either critically ill or have the potential to develop a critical illness. Builds on sound assessment skills and broad experiences of competent registered nurses.

Registration Restrictions: RN licensure in state of Alaska.

NS A429 Perioperative Nursing 3 Credits

Introduces perioperative nursing, its origin and purpose, including functions of the surgical suite team members. Covers the perioperative nursing role as it relates to preoperative preparation, intraoperative period, and recovery.

Registration Restrictions: RN licensure or departmental approval

Prerequisites: NS A300 with a minimum grade of C and NS A303 with a minimum grade of C and NS A309 with a minimum grade of C and NS A313 with a minimum grade of C and NS A303L with a minimum grade of P and NS A313L with a minimum grade of P.

NS A430 Rural Health Care 3 Credits

Analysis of rural health care from a problem-solving framework. Alaskan communities are utilized as a focus for the course.

Registration Restrictions: If prerequisite not met, then RN licensure in the state of Alaska.

Prerequisites: NS A300 with a minimum grade of C.

NS A431 Human Sexuality in Health and Illness 3 Credits

Explores physiological, psychological and social nature of human sexuality and implications for the role of the professional nurse. Emphasizes the sexual behavior of individuals and groups and the impact of illness on sexuality.

Registration Restrictions: If prerequisites not met, then RN licensure in state of Alaska.

Prerequisites: NS A300 with a minimum grade of C and NS A303 with a minimum grade of C and NS A303L with a minimum grade of P and NS A309 with a minimum grade of C.

NS A433 Health Education: Theory and Practice 3 Credits

Provides the theoretical foundation for health education and health promotion. Develops students' abilities to design and deliver health education programs.

Registration Restrictions: Faculty permission

Crosslisted With: HS A433

Prerequisites: HS A220 or NS A300 with a minimum grade of C.

NS A434 Health Care of the Elderly 3 Credits

Overview of issues which affect older adults and their lifestyles.

Addresses normal physiological and psychosocial aging changes, and health concepts of prevention, promotion, and protection. Includes issues affecting care giving of older family members in a multitude of settings. Explores health policies which have financial, legal, and ethical implications. Highlights special needs of Alaskan elderly.

Registration Restrictions: Prerequisites or RN licensure in Alaska.

Prerequisites: NS A300 with a minimum grade of C and NS A303 with a minimum grade of C and NS A303L with a minimum grade of P and NS A309 with a minimum grade of C.

NS A435 Disaster Nursing 3 Credits

Exploration of varying types of disasters, their effects on populations and the subsequent role of federal, state, and local agencies in management. Examines roles of the health care agencies and nursing responsibilities both within the community and in acute care agencies.

Registration Restrictions: Prerequisites or RN licensure in Alaska.

Prerequisites: NS A303 with a minimum grade of C or concurrent enrollment and NS A309 with a minimum grade of C or concurrent enrollment.

NS A442 Introduction to Forensic Nursing 3 Credits

Provides an overview of forensic nursing. Explores the etiology of interpersonal violence, intentional injury, and trauma in relation to victim and/or perpetrator populations. Develops understanding of the collaborative and multidisciplinary role of this specialty.

Registration Restrictions: RN licensure in the state of Alaska.

Prerequisites: NS A313 with a minimum grade of C and NS A313L with a minimum grade of P and NS A315 with a minimum grade of C and NS A315L with a minimum grade of P.

NS A451 Introduction to Neonatal Intensive Care Nursing 3 Credits

Introduction to neonatal critical care nursing. Topics include the pathophysiology and nursing management of common neonatal disease states, developmentally-focused nursing care of premature and newborn infants, and current issues and trends in neonatal nursing.

Prerequisites: NS A401 or concurrent enrollment.

NS A490 Selected Topics in Nursing Practice 3 Credits

Enhances and extends students' understanding of a selected topic.

Special Note: May repeat once with a change of topic.

Registration Restrictions: Nursing major or RN license in state of Alaska

Prerequisites: NS A204 with a minimum grade of C and NS A216 with a minimum grade of C and NS A300 with a minimum grade of C.

NS A625L Biostatistics for Health Professionals Lab 1 Credit

Introduction to statistical analysis using statistical software. Focuses on creating a database, evaluating data for entry errors, identifying statistical test assumptions, and computing descriptive and inferential statistics.

Registration Restrictions: Graduate standing or instructor permission, and grade of C or better in undergraduate statistics course

Prerequisites: HS A625 or concurrent enrollment.

Occupational Safety & Health (OSH)

Courses

OSH A101 Introduction to Occupational Safety and Health **3 Credits**

Introduces regulatory, consensus and industrial standards applicable to the occupational safety and health profession. Examines the role of the safety professional and the philosophy of incident prevention in the workplace.

Prerequisites: WRTG A110 with a minimum grade of C or (Accuplacer-Reading Comp with a score of 080 and Accuplacer-Sentence Skills with a score of 090) or Accuplacer-Sum AASS + AARC with a score of 170 or SAT Critical Reading Score with a score of 530 or SAT Verbal Score with a score of 530 or Enhanced ACT English with a score of 22 or ACT English with a score of 22.

OSH A108 Injury Prevention and Risk Management **3 Credits**

Identifies safety, health and risk management, and incident prevention in the workplace. Emphasizes materials handling, electrical and machine safety, first response to fire and medical emergencies, safety and health hazards, and incident prevention.

Prerequisites: (WRTG A111 with a minimum grade of C or WRTG A1W with a minimum grade of C) and (MATH A105 with a minimum grade of C or Accuplacer-Coll/Lvl Math with a score of 050) and OSH A101 with a minimum grade of C.

OSH A111 Occupational Safety Training Needs and Methods **3 Credits**

Introduces safety and health training needs in the workplace and includes development of training materials to conduct training sessions for diverse audiences. Emphasizes regulatory compliance.

Prerequisites: (WRTG A111 with a minimum grade of C or WRTG A1W with a minimum grade of C) and (MATH A105 with a minimum grade of C or Accuplacer-Coll/Lvl Math with a score of 050) and OSH A101 with a minimum grade of C.

OSH A112 Introduction to Occupational Epidemiology **3 Credits**

Introduces the principles of epidemiology and how they pertain to injury prevention. Stresses the collection of data, principles of injury prevention, and data evaluation.

Prerequisites: (MATH A105 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C or MATH A155 with a minimum grade of C) and OSH A108 with a minimum grade of C.

OSH A120 Safety Program Management and Recordkeeping **3 Credits**

Discusses the role of safety in business and government. Emphasizes the philosophy of safety and health efforts by management. Examines the role of the safety professional, the types of safety management systems utilized in the workplace, and the techniques used for accurate recordkeeping.

Prerequisites: OSH A101 with a minimum grade of C and (MATH A105 with a minimum grade of C or Accuplacer-Coll/Lvl Math with a score of 050).

OSH A160 Fundamentals of Industrial Hygiene **3 Credits**

Provides a basic understanding of industrial hygiene. Focuses on introducing students to concepts, terminology, methodology and the roles of industrial hygienists.

Prerequisites: MATH A151 with a minimum grade of C and OSH A108 with a minimum grade of C.

OSH A180 Introduction to Industrial Hygiene **4 Credits**

Identifies acute and chronic health effects of exposures to chemical, physical, and biological agents in the workplace. Emphasizes types of exposures and biological effects, exposure guidelines, and basic workplace monitoring.

Prerequisites: (MATH A105 with a minimum grade of C or concurrent enrollment or MATH A151 with a minimum grade of C or concurrent enrollment or MATH A152 with a minimum grade of C or concurrent enrollment or MATH A155 with a minimum grade of C or concurrent enrollment) and OSH A101 with a minimum grade of C.

OSH A201 Hazard Control: Inspections, Audits and Investigations **3 Credits**

Covers assessment and evaluation of workplace hazards through inspections, audits and incident investigations. Includes practical applications and special emphasis on conducting incident investigations.

Prerequisites: OSH A108 with a minimum grade of C.

OSH A211 Safety Management Systems **4 Credits**

Examines the role of safety programs in the workplace. Emphasizes safety program standards, assessment, design, development, implementation and evaluation.

Prerequisites: WRTG A212 with a minimum grade of C and OSH A201 with a minimum grade of C.

OSH A215 Environmental Issues for Safety and Health Professionals **3 Credits**

Analyzes and interprets requirements for preventing air, surface water, ground water and soil contamination from industrial operations. Places special emphasis on petrochemical contamination of arctic lands and waters. Familiarizes occupational safety and health students with environmental regulations and requirements.

Prerequisites: OSH A108 with a minimum grade of C.

OSH A230 Principles of Ergonomics **3 Credits**

Examines workplace ergonomics, emphasizing types and sources of physiological stressors and their mitigation.

Prerequisites: BIOL A100 with a minimum grade of C or BIOL A102 with a minimum grade of C or BIOL A111 with a minimum grade of C.

OSH A240 Workplace Monitoring: Instrumentation and Calibration **3 Credits**

Examines the equipment used in performing measurements of environmental factors in the workplace, including noise, lighting, vibration, chemicals and heat stress. Emphasizes equipment types, applications and calibration. Evaluates environmental factors found in Alaska workplaces.

Prerequisites: OSH A160 with a minimum grade of C.

OSH A250 Hazardous Materials Operations **3 Credits**

Identifies the policies, procedures and equipment needed to manage hazardous materials emergency response and cleanup.

Prerequisites: OSH A108 with a minimum grade of C.

OSH A290 Selected Topics in Occupational Safety and Health **3 Credits**

Covers current topics not normally taught on a scheduled basis in OSH. Course content determined by industry needs.

Special Note: May be repeated with change of subtitle.

Prerequisites: OSH A101.

OSH A305 Incident Investigation and Analysis 3 Credits

Analyzes the needs and responsibilities for reporting and investigating incidents; defines and discusses the types of incidents; explores various investigation techniques; and prepares students to interview witnesses, determine causes and corrective actions, and prepare reports.

Prerequisites: OSH A201 with a minimum grade of C.

OSH A310 Human Factors 3 Credits

Discusses the human factors that must be evaluated when designing and engineering work stations and job tasks. Explores and evaluates the basics of human perceptual, cognitive and motor abilities relevant to the workplace and their impact upon workers' safety and health.

Registration Restrictions: Junior or senior standing

Prerequisites: OSH A230 with a minimum grade of C.

OSH A360 Advanced Industrial Hygiene 3 Credits

Assesses acute and chronic health effects of exposures to chemical, physical, and biological agents in the workplace. Emphasizes data gathering and analysis for the performance of workplace monitoring.

Prerequisites: OSH A160 with a minimum grade of C.

OSH A375 Process Safety Management 3 Credits

Introduces the current theory and practice of process safety, with emphasis on petrochemicals. Explores the technical, legal and management concepts necessary for the prevention of toxic chemical releases and catastrophes.

Prerequisites: OSH A211 with a minimum grade of C and OSH A250 with a minimum grade of C and OSH A360 with a minimum grade of C.

OSH A390 Selected Topics in Occupational Safety and Health 1-3 Credits

Covers various topics not normally taught on a scheduled basis in OSH. Course content determined by industry needs.

Special Note: May be repeated for a maximum of 9 credits with change of subtitle.

Registration Restrictions: Department approval

OSH A405 Construction Industry Safety Management 3 Credits

Focuses on the recognition, control and management of hazards encountered in the construction industry. Analyzes safety and health hazards to develop plans and programs that mitigate or eliminate hazards. Includes a detailed discussion of 29 CFR Part 1926.

Prerequisites: CM A205 with a minimum grade of C or OSH A201 with a minimum grade of C.

OSH A420 Legal Aspects of Safety 3 Credits

Analyzes and evaluates the common legal, ethical and professional issues that safety and health professionals may encounter in the workplace. Topics explored include OSHA and AKOSH, EPA and ADEC, Bureau of Safety and Environmental Enforcement (BSSE), Mine Safety and Health Administration (MSHA), Workers' Compensation, and common liability issues.

Prerequisites: (PHIL A303 with a minimum grade of C or PHIL A304 with a minimum grade of C or PHIL A305 with a minimum grade of C) and OSH A215 with a minimum grade of C.

OSH A450 Risk Management for Safety and Health 3 Credits

Focuses on identification, evaluation and control of workplace hazards and risks using loss control techniques and the risk management process. Emphasizes integration of risk management strategies into daily operations.

Prerequisites: OSH A305 with a minimum grade of C and STAT A200 with a minimum grade of C.

OSH A460 Economic Value of Safety 3 Credits

Integrates professional, communication and analytical skills with general education knowledge to evaluate costs and savings associated with developing and maintaining health and safety programs. Assesses and calculates the effects of injuries and incidents on organizations' productivity and profits. Requires a comprehensive written report and an oral presentation at the end of the class.

Registration Restrictions: Junior or senior standing in the Community & Technical College

Prerequisites: OSH A450 with a minimum grade of C or concurrent enrollment.

Attributes: UAA Integrative Capstone GER.

OSH A495 Advanced Occupational Safety and Health Internship 3 Credits

Provides career development and exploration through experience by placement in a workplace safety position. Requires interns to perform duties directly related to occupational safety and health management functions.

Paralegal (PARL)

Courses**PARL A236 Ethics and Paralegals 1 Credit**

Course deals systematically with nine canons of the American Bar Association as they address practical problems of legal assistants who work under the supervision of attorneys. Focus upon rules and opinions directed at the practitioners of law in Alaska. Discussion of regulation by bar associations and attorneys.

Special Note: Offered spring semesters.

Prerequisites: LEGL A101 and LEGL A215.

PARL A456 Advanced Legal Analysis and Writing 4 Credits

Extensive research and written work applying legal principles to assigned fact patterns. Develops students' ability to perform objective written evaluations of legal issues in legal memoranda as well as persuasive advocacy in formal briefs.

Prerequisites: WRTG A111 with a minimum grade of B and (WRTG A211 with a minimum grade of B or WRTG A212 with a minimum grade of B or WRTG A213 with a minimum grade of B or WRTG A214 with a minimum grade of B or ENGL A311 with a minimum grade of B or ENGL A312 with a minimum grade of B or ENGL A313 with a minimum grade of B or ENGL A414 with a minimum grade of B or ENGL A487 with a minimum grade of B) and LEGL A101 with a minimum grade of C and LEGL A356 with a minimum grade of C.

Paramedical Technology (PMED)

Courses

PMED A241 Paramedicine I 8 Credits

Applies the knowledge and skills of airway management and ventilation while integrating pathophysiological principles and assessment findings to formulate impressions and implement treatment plans needed while caring for patients who have suffered an acute injury or illness.

Registration Restrictions: Current Alaska EMT-1 or National Registry EMT-Basic; Acceptance into the PMED Program.

Prerequisites: BIOL A111 with a minimum grade of C and BIOL A111L and BIOL A112 with a minimum grade of C and BIOL A112L.

Corequisites: PMED A242.

PMED A242 Clinical Rotation I 4 Credits

Paramedic skills are performed in acute care settings.

Registration Restrictions: Current Alaska EMT-1 or National Registry EMT-Basic; Acceptance into the PMED Program.

Prerequisites: BIOL A111 with a minimum grade of C and BIOL A111L and BIOL A112 with a minimum grade of C and BIOL A112L.

Corequisites: PMED A241.

PMED A251 Paramedicine II 8 Credits

Integrates pathophysiological principles and assessment findings to formulate impressions and implement treatment plans needed when caring for trauma patients, and patients with special needs.

Prerequisites: PMED A241 and PMED A242.

Corequisites: PMED A252.

PMED A252 Clinical Rotation II 4 Credits

Paramedic skills are performed in hospital settings, specifically in emergency departments, operating rooms, intensive care/critical care units, labor and delivery units, pediatric units, and psychiatric wards.

Prerequisites: PMED A241 and PMED A242.

Corequisites: PMED A251.

PMED A261 Paramedicine III 8 Credits

Integrates pathophysiological principles and assessment findings to formulate impressions and implement treatment plans needed when caring for medical patients. This course further incorporates assessment-based management and vehicle operations.

Prerequisites: PMED A251 and PMED A252.

Corequisites: PMED A262.

PMED A262 Clinical Rotation III 4 Credits

Paramedic skills are performed in hospital settings, specifically in emergency departments, operating rooms, intensive care/critical care units, labor and delivery units, pediatric units, psychiatric wards, and on air ambulances.

Prerequisites: PMED A251 and PMED A252.

Corequisites: PMED A261.

PMED A295 Paramedic Internship 12 Credits

Pre-hospital field experience under the guidance of a paramedic preceptor on an advanced life support ambulance. Interns perform all aspects of paramedic care.

Registration Restrictions: All PMED major and AAS general degree education requirements must be completed prior to registration.

Prerequisites: PMED A261 and PMED A262.

Petroleum Technology (PETR)

Courses

PETR A155 Process Industry Basics 3 Credits

Introduces reading and sketching of process drawings, orthographic projections, and piping isometrics. Overview of basic industrial mathematics, calculations and conversions. Covers basic piping and tubing systems. Overview of various measurement tools and techniques; basic industrial hand tools and their safe and effective use; the various welding types and techniques; and symbol reading.

Prerequisites: MATH A055 with a minimum grade of C.

PETR A240 Industrial Process Instrumentation III 3 Credits

Presents details of the installation and application of continuous process instruments in closed feedback control loops. Includes practice of functional check-out procedures on physical hardware. Introduces ladder logic used for discrete control of processes.

Registration Restrictions: Degree-seeking Industrial Process Instrumentation or Process Technology students.

Prerequisites: PRT A144.

PETR A244 Industrial Process Instrumentation IV 3 Credits

Explores techniques used in designing and optimizing control loops. Develops methods for testing and optimizing feedback and feed forward control loops, and introduces loop implementation methods in digital control environments.

Prerequisites: PETR A240 with a minimum grade of C and MATH A105 with a minimum grade of C.

Pharmacy Technology (PHAR)

Courses

PHAR A101 Introduction to Pharmacy 3 Credits

Introduces pharmacy practice and the technician's role in various pharmacy settings. Emphasizes the history of pharmacy, pharmacy law and ethics, pharmacy terminology, symbols, and dosage forms.

PHAR A105 Pharmacology for Technicians I 3 Credits

Introduces drug terms, definitions, origins and uses with an emphasis on factors affecting drug actions and adverse reactions. Provides overview of pharmacology, pharmacodynamics and pharmacokinetics. Focus on respiratory, GI, urinary, cardiovascular, chemotherapy, nutritional, and CODE blue emergency drugs and carts. This is part 1 of a 2-part course.

PHAR A107 Pharmacy Calculations 3 Credits

Provides students with the interpretive skills to read, decode and process a variety of prescriptions requiring mathematical computations. Introduces the basic concepts needed to calculate oral, parenteral, pediatric and elderly drug dosages. Calculation skills for interpreting intravenous flow rates, and compounding are also included.

PHAR A111 Techniques of Pharmacy Practice 3 Credits

Introduces techniques and demonstrations of pharmacy practices including accepting prescriptions and insurance cards, checking for required information, processing, filling, labeling, and completing patient profiles. Concentrates on compounding, mixing, IV preparation, and sterile techniques.

PHAR A115 Pharmacology for Technicians II 3 Credits

Introduces drug terms, definitions, origins and uses with an emphasis on factors affecting drug actions and adverse reactions. Focus on anti-infectives, pain relievers, muscle relaxants, other central nervous system, hormone, diabetic, and topical medications.

PHAR A192 Topics in Pharmacy 1 Credit

Explores current issues in the field of pharmacy. Uses discussion format enhanced by speakers, role-playing, problem solving, case studies and current news articles in pharmacy. Emphasizes ethical principles and their relationship to the technical applications of the practice of pharmacy.

Philosophy (PHIL)

Courses

PHIL A101 Introduction to Logic 3 Credits

Develops formal and informal reasoning skills, introduces deductive logic via statement logic, analyzes arguments and introduces scientific and inductive reasoning, reviews common fallacies and methods for evaluating arguments.

Attributes: UAA Humanities GER.

PHIL A201 Introduction to Philosophy 3 Credits

Introduces works of major influential thinkers, both ancient and modern, focusing on the Western philosophical tradition. Emphasizes central problems of knowledge, reality, and good and evil.

Attributes: UAA Humanities GER.

PHIL A211 Ancient and Medieval Philosophy 3 Credits

Primarily surveys Western philosophy from the pre-Socratic era through the late Middle Ages. Traces development of scientific, metaphysical, epistemological and ethical thought with emphasis on pivotal historical figures and debates.

Attributes: UAA Humanities GER.

PHIL A212 Early Modern Philosophy 3 Credits

Surveys philosophy from the Scientific Revolution through German Idealism (Modern Period). Traces the development of scientific, metaphysical, epistemological and ethical thought with emphasis on historical texts.

Attributes: UAA Humanities GER.

PHIL A231 Truth, Beauty, and Goodness 3 Credits

Integrated approach to the study of critical and normative thinking, including: standards of truth in logic, mathematics, and science; standards of ethical goodness, and standards for the critical appraisal of art and the beautiful.

Crosslisted With: LSIC A231.

Prerequisites: WRTG A111 or concurrent enrollment.

PHIL A301 Ethics 3 Credits

An introduction to major theories in normative ethics and metaethics, and the arguments of important moral philosophers. Emphasis on critical reasoning, as well as evaluation and analysis of arguments. Includes the application of ethical theory to contemporary moral issues, such as rights and distributive justice, environmental and animal issues, abortion, terrorism, and euthanasia.

Prerequisites: WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C.

Attributes: UAA Humanities GER.

PHIL A302 Biomedical Ethics 3 Credits

An in-depth exploration of current bioethical issues affecting the delivery of health care services. Theories of ethics and related principles are explored as a basis for professional decision-making and public policy determination. The focus of the course is the process of ethical inquiry and its relevance for contemporary health practices, research and education.

Registration Restrictions: Junior standing.

PHIL A303 Environmental Ethics 3 Credits

Critically examines central philosophical questions regarding human attitudes toward the environment, including non-human animals. Explores the ideas of nature in philosophy and the moral basis to preserve and protect environmental systems. Examines the animal welfare-rights debate and concerns such as species extinction and wilderness management, global climate change, sustainability, effects of environmental harms to people, deforestation, obligations to future generations, agricultural land development and use, food security and policy, and human overpopulation. Considers local and global policy frameworks and institutions best suited to address these concerns.

Registration Restrictions: Junior standing recommended.

Prerequisites: PHIL A101 with a minimum grade of C or PHIL A201 with a minimum grade of C.

PHIL A304 Business Ethics 3 Credits

Examines moral issues raised by contemporary business practice. Topics include moral justifications and critiques of the market system, the nature and scope of corporate responsibility, ethical issues in the workplace (e.g. whistle-blowing, sexual harassment, affirmative action, etc.), and environmental implications of business practices.

Registration Restrictions: Junior standing.

PHIL A305 Professional Ethics 3 Credits

Focuses on the duties of professionals to their clients and society, and examines the dilemmas that are created when these duties come in conflict with one another and with the duties of general morality. Uses case studies highlighting issues in engineering, information technology, law, medicine, journalism and other professions.

Prerequisites: WRTG A111 with a minimum grade of C.

Attributes: UAA Humanities GER.

PHIL A309 Mind and Machines 3 Credits

Focuses on central philosophical questions about the mind, such as the nature of consciousness, mental causation, the location of perceptual qualities like color in the mind or the world, personal identity, and the mind/body problem. Examines the mind's intimate connection with contemporary psychology, biology, neuro- and cognitive sciences, and what these insights imply for human freedom. Includes topics in science and technology studies related to the agency of persons and of artificial beings, such as cognitive abilities of robots or computers, and the moral rights of artificial intelligent beings.

Registration Restrictions: Junior standing recommended.

Prerequisites: PHIL A101 with a minimum grade of C or PHIL A201 with a minimum grade of C.

PHIL A311 Truth and Reality 3 Credits

Focuses on the topics of existence, universals and particulars, individuals and classes, change and the persistence of objects and persons, knowledge and belief, internalism and externalism, perception, materialism, truth, and reality.

Registration Restrictions: Junior or senior standing

Prerequisites: PHIL A101 with a minimum grade of C or PHIL A201 with a minimum grade of C.

PHIL A313 Eastern Philosophy and Religion 3 Credits

Study of Eastern philosophical and religious traditions, particularly Hinduism, Buddhism, Daoism and Confucianism. Includes studying basic concepts, tenets and practices of these traditions and related modern developments.

Prerequisites: WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C.

Attributes: UAA Humanities GER.

PHIL A314 Western Religions 3 Credits

Study of three Western monotheisms--Judaism, Christianity, and Islam. Covers basic tenets, practices and histories of the monotheisms. Examines the intersections of religion with contemporary concerns such as gender, ethnicity, and violence.

Prerequisites: WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C.

Attributes: UAA Humanities GER.

PHIL A317 Metaphysics 3 Credits

Current issues in metaphysics, including topics such as free will, universals, space and time, modality and essentialism with an emphasis on critical reasoning, argument evaluation and analysis.

Registration Restrictions: Six credits with minimum grade of C from PHIL A101, PHIL A201, PHIL A211, PHIL A212 or PHIL A301.

PHIL A318 Epistemology 3 Credits

Traditional and contemporary issues in epistemology including, but not limited to, skepticism, the structure of knowledge and justification, epistemic closure principles, the sources of justification (memory, testimony, and perception), internalist and externalist theories of justification, virtue epistemology, naturalized epistemology and the a priori, the social and political dimensions of knowledge, and epistemic contextualism and invariantism.

Registration Restrictions: Six credits with minimum grade of C from PHIL A101, PHIL A201, PHIL A211, PHIL A212 or PHIL A301.

PHIL A321 Philosophy of Religion 3 Credits

An advanced study of current issues in philosophy of religion including topics such as the existence of God, the nature of divine attributes, the problem of evil, science and religion, the meaningfulness of religious language, the epistemology of religious experience, and non-western perspectives on religion, with an emphasis on critical reasoning, argument evaluation, and analysis.

Prerequisites: PHIL A101 with a minimum grade of C or PHIL A201 with a minimum grade of C or PHIL A211 with a minimum grade of C or PHIL A212 with a minimum grade of C or PHIL A301 with a minimum grade of C.

PHIL A350 Contemporary Social and Political Philosophy 3 Credits

Evaluates the philosophical merits of contemporary (20th Century to present) theories of justice, government, citizenship, culture, and society. Theories are explored in light of their foundations in ethics, epistemology, metaphysics, philosophy of language, and theories of rationality. Topics include, but are not limited to, the justification of human rights, democracy, economic social structures; and critical theories of society.

Prerequisites: WRTG A111 or WRTG A211 or WRTG A212.

PHIL A400 Ethics, Community, and Society 3 Credits

An integrated study of a selected topic on a global ethical issue and the interests and responsibilities of individuals, communities and societies. Topics may vary from semester to semester.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing (at least 60 credit hours).

Prerequisites: PHIL A301.

Attributes: UAA Integrative Capstone GER.

PHIL A401 Aesthetics 3 Credits

An investigation into the nature of art and the creative process from both an historical and theoretical perspective, utilizing especially the philosophy of the ancient Greeks, the Romantic thinkers and contemporary semiotics.

PHIL A406 Philosophy of Law 3 Credits

Considers various philosophical accounts of the nature of law and grounds of its authority; the relationship between law and morality; connections between law and political ideals such as liberty, equality, and economic well-being; and methods of constitutional interpretation. Addresses contemporary controversies in the law such as civil disobedience, criminal responsibility, capital punishment, property rights, religious freedom, freedom of speech, and affirmative action.

Registration Restrictions: JUST A315 or 6 credits in Philosophy, and junior standing.

PHIL A415 Feminist Philosophy 3 Credits

Examines women's position in the writings of prominent thinkers in the Western philosophical canon; contemporary theories concerning the nature of gender and its intersection with race, class, and sexuality; and feminist contributions to philosophical inquiry in ethics, social/political philosophy, theories of knowledge, and/or the philosophy of science.

Registration Restrictions: WS A200 or 6 credits in philosophy, and junior standing.

PHIL A421 Philosophy of the Sciences 3 Credits

A general introduction to the philosophical problems common to the physical, biological, behavioral, and social sciences, focusing on issues concerning method, epistemology, modes of explanation, and the differences between the natural and the human sciences.

Registration Restrictions: Junior or senior standing.

PHIL A423 Advanced Ethical Theory 3 Credits

Critical issues in metaethics and normative ethics. Examines the nature of ethical claims, the basis for their authority, and the implications of such debates for normative ethics.

Prerequisites: PHIL A101 with a minimum grade of C and PHIL A201 with a minimum grade of C and PHIL A211 with a minimum grade of C and PHIL A212 with a minimum grade of C and PHIL A301 with a minimum grade of C.

PHIL A490 Topics in Contemporary Philosophy 3 Credits

An intensive and detailed study of a topic in contemporary philosophy in a seminar format.

Special Note: May be repeated twice with a change in subtitle.

Registration Restrictions: Junior or senior standing

Prerequisites: PHIL A211 with a minimum grade of C and PHIL A212 with a minimum grade of C.

PHIL A492 Seminar on an Enduring Philosopher 3 Credits

An in depth investigation of the historical background to and philosophical content of an important philosopher's thought. Philosophers studied may include Socrates, Plato, Aristotle, Augustine, Aquinas, Hobbes, Descartes, Locke, Hume, Kant, Nietzsche, or many others.

Registration Restrictions: Junior standing.

Prerequisites: PHIL A101 with a minimum grade of C and PHIL A201 with a minimum grade of C and PHIL A211 with a minimum grade of C and PHIL A212 with a minimum grade of C and PHIL A301 with a minimum grade of C.

PHIL A495 Service Learning in Applied Ethics 3 Credits

Work with a community partner in an area related to applied ethics. A service learning project will be identified and coordinated by a faculty committee in cooperation with a community partner, as related to the student's interests. Students will use the project as a means of applying and reflecting on relevant ethical concepts, decision-making, and practical reasoning skills.

Registration Restrictions: Junior standing.

Prerequisites: PHIL A101 with a minimum grade of C and PHIL A201 with a minimum grade of C and PHIL A211 with a minimum grade of C and PHIL A212 with a minimum grade of C and PHIL A301 with a minimum grade of C.

PHIL A498 Senior Research Project 3 Credits

Senior-level course in which the student will engage in independent research on a topic of his or her choosing under the supervision of a faculty member. The course culminates with the completion of a research paper of significant length prepared to publication standards.

Registration Restrictions: Senior standing, 9 credits of philosophy in addition to the prerequisites, and faculty permission.

Prerequisites: PHIL A101 with a minimum grade of C and PHIL A201 with a minimum grade of C and PHIL A211 with a minimum grade of C and PHIL A212 with a minimum grade of C and PHIL A301 with a minimum grade of C.

PHIL A607 Ethics in Clinical Medicine 1 Credit

Focuses on ethical issues in medical training and clinical practice, as well as on core topics in biomedical ethics.

Registration Restrictions: Admission to the WWAMI program or the MS program in Nursing Science, or with the consent of the instructor.

Physical Ed & Recreation (PER)

Courses

PER A100 Fitness for Life 2 Credits

Introduces key concepts associated with lifetime personal fitness. Presents a variety of physical activities for improved health-related fitness. Combines lecture with lab sessions.

PER A101 Fitness Cross Training 1 Credit

Introduces a wide variety of cross training exercise formats for total fitness. Develops individual fitness through a variety of workouts, such as step aerobics, weight training, lateral training, circuit training, and fitness walking.

PER A103 Indoor Stationary Cycling 1 Credit

Introduces the basic skills and concepts associated with indoor cycling. Applies basic principles of cycling through active participation. Introduces key concepts related to lifetime fitness.

PER A104 Aerobic Walking 1 Credit

Introduces key concepts associated with lifetime fitness. Presents the concepts and technical skills to set up and participate in a regular aerobic walking program.

PER A107 Aerobic Kickboxing 1 Credit

Presents the fundamentals of intermediate intensity kickboxing, martial arts-based aerobics, and interval training for improved physical fitness.

PER A109 Aqua Aerobics 1 Credit

Introduces key concepts related to lifetime personal fitness. Presents a variety of aqua aerobic exercise routines such as deep water jogging, aerobics to music, circuit training, and interval training. Designed for swimmers and non-swimmers.

PER A110 Beginning Zumba 1 Credit

Presents Zumba, a Latin rhythm-based exercise program. Integrates aerobic, interval and resistance training techniques for the purpose of developing overall fitness.

PER A112 Swiftwater Rescue 1 Credit

Introduces skills and equipment necessary for safe travel in and on swiftly moving water. Intensive training in river hydrology, rescue equipment and techniques, boat handling, and self and group contact rescues, leading to international certification as a swiftwater rescue technician I.

PER A113 Beginning Pilates 1 Credit

Introduces Pilates as an effective way to improve strength and flexibility. Covers basic fitness concepts and exercises which target development of core strength (abdomen, lower back, buttocks, hips, and thighs) by utilizing one's own body weight for resistance.

PER A116 Circuit Training 1 Credit

Introduces key concepts related to lifetime personal fitness. Presents circuit training as a way to improve strength, physical conditioning, and general sports performance. Covers cardiorespiratory training, flexibility exercises, and safe techniques for improved muscular strength and endurance.

PER A117 Shape Up With Weights 1 Credit

Introduces key concepts related to lifetime personal fitness. Presents weight room resistance exercises to tone and condition major muscle groups. Introduces total program planning, including cardiorespiratory training, flexibility exercises, and healthy nutritional practices.

PER A118 Beginning Weight Training 1 Credit

Introduces key concepts related to lifetime personal fitness. Presents resistance exercises to strengthen and condition major muscle groups.

PER A120 Beginning Yoga 1 Credit

Introduces yoga physical exercises, breathing, relaxation and concentration techniques as an approach to wellness.

PER A121 Yoga for Athletes 1 Credit

Introduces yoga exercises, breathing techniques, and relaxation exercises for athletes. Presents stretching, strengthening, breath control, and mental conditioning exercises as an aid to improving performance and enjoyment of athletic activity.

PER A123 Beginning Tai Chi 1 Credit

Introduces Tai Chi exercises designed to improve health, tranquility, energy, and strength.

PER A124 Beginning Karate 1 Credit

Introduces karate philosophy, principles, and applications. Training and discipline on the physical, mental, and spiritual levels will be covered.

PER A125 Beginning Kung Fu 1 Credit

Introduces Northern Shaolin Kung Fu philosophy, principles, and applications. Training and discipline on the physical, mental, and spiritual levels will be covered.

PER A127 Beginning Tae Kwon Do 1 Credit

Introduces Tae Kwon Do philosophy, principles, and applications. Training and discipline on the physical, mental, and spiritual levels will be covered.

PER A130 Beginning Tennis 1 Credit

Introduces basic skills and knowledge to play singles and doubles tennis. Applies basic principles of tennis through active participation.

PER A135 Beginning Swimming 1 Credit

Introduces proper breathing technique and basic strokes for those with little or no swimming background. Emphasizes personal water safety.

PER A137 Beginning Ice Skating 1 Credit

Introduces the basic skills and knowledge associated with ice skating. Applies basic principles of skating through active participation.

PER A141 Beginning Basketball 1 Credit

Introduces the basic skills and knowledge associated with playing basketball. Applies basic principles of basketball through active participation.

PER A142 Beginning Soccer 1 Credit

Introduces the basic skills and knowledge associated with playing soccer. Applies basic principles of soccer through active participation.

PER A143 Beginning Hockey 1 Credit

Introduces the basic skills and knowledge associated with playing hockey. Applies basic principles of hockey through active participation.

PER A144 Beginning Volleyball 1 Credit

Introduces the basic skills and knowledge associated with playing volleyball. Applies basic principles of volleyball through active participation.

PER A146 Beginning Rock Climbing 1 Credit

Introduces the fundamentals of rock climbing in Alaska. Covers hazard evaluation and risk assessment, selection of personal gear, technical needs, and safety equipment. Provides opportunity to practice knots, rope handling, belay, basic descending techniques, and top-rope rock climbing.

Special Note: Requires ability to function comfortably in inclement weather.

PER A147 Beginning Ice Climbing 1 Credit

Introduces the fundamentals of ice climbing in Alaska. Covers hazard evaluation and risk assessment, selection of personal gear, technical needs, and safety equipment. Introduces knots, rope handling, belay, basic descending techniques, and top-rope ice climbing.

Special Note: Requires ability to function comfortably in extremely cold temperatures and inclement weather.

PER A148 Beginning Indoor Sport Climbing 1 Credit

Introduces the fundamentals of sport climbing in an indoor environment. Covers hazard evaluation and risk assessment specific to climbing gyms. Also covers selection of personal gear, technical needs, and safety equipment specific to indoor climbing. Introduces and provides opportunity to practice knots, rope handling, belaying, descent techniques, and top-rope climbing on an indoor climbing wall.

PER A150 Water Safety and Rescue 1 Credit

Introduces course participants to hazards and mitigation techniques for safe travel on rivers, lakes, and oceans. Covers basic safety and rescue theories, procedures, and techniques that are effective in contributing to safe and enjoyable water travel.

Special Note: Must be able to swim. Must have good level of physical fitness. May require purchase or rental of additional equipment. Must be able to function comfortably in inclement weather.

Prerequisites: PER A151 or PER A152 or PER A153.

PER A151 Beginning Canoeing 1 Credit

Introduces the most commonly used equipment, techniques, challenges, and risks found in the sport of canoeing. Includes instruction on equipment selection, trip planning, canoeing strokes and re-entry techniques with an emphasis on risk assessment and risk management.

Special Note: Requires excellent backcountry camping skills and the ability to function comfortably in inclement weather. An overnight field outing may be included in the course. Students may need to rent or purchase additional gear.

PER A152 Beginning River Rafting 1 Credit

Introduces the most commonly used equipment, techniques, challenges, and risks found in the sport of river rafting. Includes instruction on equipment selection, trip planning, preparing to paddle/row and minimum impact practices with an emphasis on risk assessment and risk management.

Special Note: Requires good backcountry camping skills and the ability to function comfortably in inclement weather. An overnight field outing may be included in the course. Students may need to rent or purchase additional gear.

PER A153 Beginning Sea Kayaking 1 Credit

Introduces the fundamentals of sea kayaking in Alaska. Includes the most commonly used equipment, techniques, challenges, and risks found in the sport. Provides instruction in selecting equipment, trip planning, transporting boats, preparing to paddle, boat handling, re-entry techniques, and sea kayaking strokes. Emphasizes risk assessment and safety skills.

Special Note: Requires good backcountry camping skills and the ability to function comfortably in inclement weather. An overnight field outing may be included in the course. Students may need to rent or purchase additional gear for this course.

PER A155 Fly Fishing 1 Credit

Introduces fundamental skills for fly fishing in Alaska. Covers selection of equipment, history of fly fishing, fish identification, basic stream entomology, reading water for fish location, and stream etiquette/ethics. Provides opportunities to practice knot and fly tying, casting, and cleaning fish.

Special Note: Requires good physical fitness and ability to function comfortably in inclement weather. Student may need to rent or purchase equipment for this course. A valid fishing license is required for the outing.

PER A160 Beginning Cross-Country Ski: Diagonal Stride 1 Credit

Introduces fundamentals of diagonal-stride cross-country skiing. Covers selection of personal clothing, ski and safety equipment, recognition and prevention of cold-weather injuries, and skiing skills and trail ethics.

Special Note: Requires ability to perform comfortably in extremely cold and inclement weather. Students may need to rent or purchase additional equipment for this course.

PER A164 Skiing Alaska's Backcountry 2 Credits

Introduces skills needed to ski off-trail. Covers techniques for traveling on rolling and inclined terrain, negotiating side hills, and skiing inclines and declines of up to 40 degrees. Covers selecting personal and group safety equipment, evaluating avalanche hazards and assessing risk.

Special Note: Requires ability to function comfortably in extremely cold or inclement weather. A good level of physical fitness is required. Ability to ski/snowboard at intermediate level to be determined in first field session. Students may need to rent or purchase additional equipment for this course.

PER A165 Avalanche Hazard Recognition and Evaluation 1 Credit

Introduces travel techniques in avalanche-prone backcountry terrain. This is a field-oriented backcountry avalanche course covering rescue, terrain analysis, snow study, stability, evaluation, route-finding, decision-making and safe travel techniques.

Special Note: Requires a good level of physical fitness. May require purchase or rental of additional equipment. Requires travel in mountainous terrain. Must have ability to function comfortably in inclement weather.

PER A167 Dog Mushing 1 Credit

Introduces the practice of dog mushing, including the sport's history, dog breeds and characteristics, their training and feeding needs, kennel-management routines, and dog-handling skills.

Special Note: Requires ability to function comfortably in extremely cold and/or inclement weather.

PER A168 Winter Camping Alaska 1 Credit

Introduces winter camping in Alaska. Covers selection of personal, group and safety equipment appropriate for an overnight outing. Emphasizes snow shelter construction and learning to assess risk in the field. Course includes an overnight outing.

Special Note: Requires good physical condition and ability to perform comfortably in extremely cold and/or inclement weather.

PER A169 Four-Season Backpacking 3 Credits

Introduces four-season backpacking in Alaska. Selection of personal and group safety equipment appropriate for a backpacking trip during any season. Presents trip planning, prevention and assessment of cold injuries, frontcountry and backcountry navigation, avalanche hazard evaluation and rescue techniques. Emphasizes risk assessment and risk management.

Special Note: Requires good backcountry camping skills, good physical fitness level and ability to perform comfortably in extremely cold and/or inclement weather. Students may need to rent or purchase additional equipment for this course.

PER A170 Backpack Alaska 3 Credits

Provides an introduction to backpacking in Alaska. Covers trip planning and selection of personal, group, and safety equipment appropriate for overnight trips. Presents the opportunity during outings to practice hazard evaluation, front and backcountry navigation, and hiking/camping/cooking skills.

Special Note: Requires good physical condition and ability to function comfortably in inclement weather.

PER A172 Fishing Academy 2 Credits

A practical introduction to the basics of fishing, including equipment selection, types of line, lures, and flies, and techniques geared toward Alaska lakes and streams. Includes wildlife safety, basic biology, and "caring for your catch." Emphasizes risk assessment and safety skills.

Special Note: Students must be 18 or older to enroll and must abide by all University and course safety rules.

Registration Restrictions: Must be 18 years of age or older to enroll.

PER A173 Beginning Mountaineering 1 Credit

Applies backpacking and climbing techniques to an alpine mountain environment. Includes instruction on alpine climbing, glacier-travel, and crevasse-rescue techniques. Introduces roped team travel and trip planning with an emphasis on risk assessment and hazard mitigation in an alpine environment.

Special Note: Requires excellent physical condition and the ability to function comfortably in extremely cold and/or inclement weather. Additional equipment may need to be purchased or rented for this course. Includes an overnight field outing.

Prerequisites: PER A169 and PER A181.

PER A181 Crevasse Rescue Techniques 1 Credit

Introduces the most commonly used equipment, techniques, and risk associated with crevasse rescue. Provides information for minimizing the chance of a crevasse fall and implementing a successful extrication. Emphasizes risk assessment and technical skill acquisition.

Special Note: Requires the ability to perform comfortably in extremely cold and/or inclement weather. Field sessions include all-day clinics and may include overnight outings.

PER A188 Wellness for Women 3 Credits

Introduces basic concepts for wellness including theories and definitions of optimal health. Includes topics such as substance abuse, sexually transmitted diseases, fitness, nutrition, mental health, cardiovascular disease, sexuality, and other significant health issues, with particular emphasis on the needs and concerns of women.

Special Note: Students will apply concepts through physical activities outside of class time.

PER A190 Selected Topics in Health, Physical Education and Recreation 1-4 Credits

Examines selected topics in the health, physical education and recreation industry according to industry demand or faculty expertise.

Special Note: Course may be repeated with change in topic.

Registration Restrictions: Department approval

PER A218 Avalanche Theory II 2 Credits

Provides an overview of skills and techniques required for certification at AIARE level 2. Focus is on safe and efficient performance of the activity. Some classes may take place outdoors and/or off campus. Open to all students. Fulfills an experiential elective in the Outdoor Leadership AAS program.

Registration Restrictions: AIARE L1 or intermediate ability to travel on randonee or teleskis, showshoes, or split board.

PER A220 Intermediate Yoga 1 Credit

Presents intermediate level yoga physical exercises, breathing techniques, meditation, and relaxation exercises.

Prerequisites: PER A120.

PER A223 Intermediate Tai Chi 1 Credit

Presents intermediate level Tai Chi exercises designed to improve health, tranquility, energy, and strength.

Prerequisites: PER A123.

PER A225 Intermediate Kung Fu 1 Credit

Presents intermediate level Northern Shaolin Kung Fu principles and applications. Training and discipline on the physical, mental, and spiritual levels will be covered.

Prerequisites: PER A125.

PER A234 Swimming Conditioning 1 Credit

Develops and refines swimming skills, physical conditioning, and knowledge of training and competition. Designed for intermediate to competitive level swimmers.

PER A241 Intermediate Basketball 1 Credit

Emphasizes game strategy and develops intermediate and advanced basketball skills. Applies offensive and defensive strategies of basketball through active participation.

Prerequisites: PER A141.

PER A242 Intermediate Soccer 1 Credit

Emphasizes game strategy and develops intermediate and advanced soccer skills. Applies offensive and defensive strategies of soccer through active participation.

Prerequisites: PER A142.

PER A243 Intermediate Hockey 1 Credit

Develops intermediate level power skating techniques and hockey skills. Applies defensive and offensive strategies and tactics.

Prerequisites: PER A143.

PER A244 Intermediate Volleyball 1 Credit

Emphasizes game strategy and develops intermediate and advanced volleyball skills. Applies offensive and defensive strategies of volleyball through active participation.

Prerequisites: PER A144.

PER A247 Intermediate Ice Climbing 2 Credits

Builds on the skills and knowledge gained in Beginning Ice Climbing. Introduces equipment, techniques, and risk assessment and mitigation skills associated with lead climbing waterfall ice. Covers techniques to safely and efficiently ascend and descend a multi-pitch ice climb. Covers building appropriate anchors, climbing physics, belaying, protection strategies, rope work, station management, rappelling and improvised rescue. Emphasizes risk assessment and technical-skill acquisition.

Special Note: Requires excellent physical condition and the ability to perform comfortably in extremely cold and/or inclement weather. Field sessions include all-day clinics and may involve considerable travel distances from Anchorage. It is recommended students purchase their own climbing gear for the class.

Prerequisites: PER A147.

PER A252 Intermediate River Rafting 2 Credits

Provides skill development for rafting up to class IV whitewater rivers for those who have basic whitewater rafting skills. Introduces advanced paddle/oar skills, expands on reading water, and teaches advanced boat maneuvering with an emphasis on risk assessment and management.

Special Note: Participants must be able to demonstrate basic whitewater rafting skills in class II whitewater at the beginning of the course. Requires ability to function comfortably in inclement weather. An overnight field outing will be included in the course. Participants may be required to rent or purchase additional gear. First aid and CPR training is highly recommended.

Prerequisites: PER A152.

PER A253 Intermediate Sea Kayaking 2 Credits

Provides foundational open water sea kayaking skills for individuals with sheltered coastal kayaking skills. Introduces open water crossings, paddling around exposed headlands, and exposure to cliffed-out shore lines with limited beach landings. Emphasizes development of efficient strokes, practical self-rescue techniques, understanding the marine environment, trip planning and risk assessment and management.

Special Note: Participants must demonstrate proficient sheltered coastal kayaking skills at course start. Requires excellent backcountry camping skills and the ability to function comfortably in inclement weather. Wilderness camping will be included in the course. Participants may be required to purchase or rent additional gear. CPR and first aid training is highly recommended.

Prerequisites: PER A153.

PER A259 North American Mechanized Ski Guide 3 Credits

Participants will receive training in guided helicopter operations, mountaineering, avalanche assessment, and search and rescue skills. Course graduates receive NAMSG certification and high-angle rescue training.

PER A272 Advanced Weight Training 1 Credit

Presents key concepts related to lifetime personal fitness. Applies advanced techniques for resistance exercises to strengthen and condition major muscle groups through correct use of variable resistance equipment and free weights.

Prerequisites: PER A117 or PER A118.

Physical Ed Professional (PEP)

Courses

PEP A112 First Aid and CPR for Professionals 1 Credit

Provides CPR (infant, child, and adult) and first aid training. Successful completion of performance skills and written test will lead to national certification in first aid and CPR.

PEP A115 Fitness Leadership/Group Fitness and Personal Training 3 Credits

Presents concepts of personally tailored fitness programs for a wide variety of individuals, including those with common health challenges. Introduces basics of cardiorespiratory, metabolic, neuromuscular, environmental exercise physiology, biomechanics and kinesiology in regard to safe exercise. Provides information on nutrition and weight loss, injury prevention, basic emergency procedures, legal issues, and professional responsibilities of fitness instructors and personal trainers.

Registration Restrictions: Must be concurrently enrolled in PEP A117.

PEP A117 Techniques in Personal Training 2 Credits

Introduces the basics of client assessment, proper use of resistance and cardio equipment, teaching techniques and injury prevention. Examines a wide range of issues related to exerciser's varied needs. Presents techniques for exercise program planning, implementation and progression for general and special populations.

Special Note: Designed for individuals interested in working in the fitness industry as a personal trainer. Conducted in a lab setting for hands-on experience.

Prerequisites: PEP A115 or concurrent enrollment.

PEP A130 Introduction to Coaching 3 Credits

Explores the purpose and objectives of interscholastic athletics. Presents principles of coaching, including: common teaching and learning styles, scientific foundations of physical activity, season planning, and the development of a personal coaching philosophy. Also examines common sports safety issues as well as basic injury prevention and treatment. Reviews guidelines and requirements for Alaska high school coaches.

Special Note: Successful completion results in eligibility for certification as a high school coach in Alaska.

PEP A161 Wilderness First Responder 4 Credits

Provides knowledge and skills necessary to administer emergency and medical care in non-urban environments. Covers basic anatomy and physiology, assessment and treatment of injuries, appropriate short-term to multi-day patient care and evacuation considerations.

Special Note: Students will be awarded nationally recognized WFR certificate upon successful completion of course and other certification requirements.

PEP A181 Introduction to Health, Physical Education and Recreation 3 Credits

Introduces the history, philosophies, objectives and foundations of health, physical education, and recreation. Surveys career and professional development opportunities.

Special Note: A field outing may be required.

PEP A182 Technology in Health, Physical Education and Recreation 1 Credit

Demonstrates use of current technology while learning trends in various settings related to health, physical education and recreation. Develops knowledge, skills and abilities to use discipline-specific technology.

Registration Restrictions: Departmental approval

Prerequisites: PEP A181.

PEP A183 Wellness Principles 1 Credit

Examines key concepts associated with the dimensions of personal wellness. Presents topics and activities for evaluation of wellness strategies for making behavior change.

Registration Restrictions: Departmental approval

Prerequisites: PEP A181.

PEP A184 Fundamental Motor Skills 1 Credit

Introduces basic patterns used in mature motor patterns of fundamental movement. Presents phases leading to mature patterns. Applies basic observation techniques to analysis of performance.

Registration Restrictions: Departmental approval

Prerequisites: PEP A181.

PEP A230 Sport Ethics 1 Credit

Emphasizes the role of the coach in building character, good sportsmanship, and positive values in athletes. Covers teachable moments, positive communication, and teamwork.

PEP A231 Drugs and Sport 1 Credit

Emphasizes the role of the coach in preventing tobacco, alcohol, and other drug use among athletes. Covers how to communicate effective substance abuse prevention messages and respond to athletes who exhibit symptoms of concern.

PEP A233 Coaching Track and Field and Running 2 Credits

Introduces track and field and running coaching techniques including creating a physical conditioning plan, developing skills and handling competitive events.

PEP A234 Coaching Wrestling 2 Credits

Introduces wrestling coaching techniques, including creating a physical conditioning plan, developing skills, and handling competitive events.

PEP A241 Coaching Basketball 2 Credits

Introduces basketball coaching techniques, including creating a physical conditioning plan, developing skills, and handling competitive events.

Prerequisites: PER A141.

PEP A251 Prevention and Care of Activity-Related Injuries 3 Credits

Introduces the profession of athletic training. Examines theories and practices in preventing, recognizing and treating common activity-related injuries.

PEP A262 Foundations of Outdoor Recreation 3 Credits

Introduction to the field of outdoor recreation and leadership including implications for individuals and groups in changing society. Examines philosophical, historical, theoretical, legal and ethical foundations of the field. Explores career opportunities and options. Examines leisure and recreation as an expression of culture, society and wellness.

PEP A264 Recreation Program Planning and Evaluation 3 Credits

Examines the fundamental, conceptual and operational aspects of recreational program planning, delivery and evaluation. Examines techniques and applications for a variety of leisure and recreational programming experiences to individuals or groups. Evaluates the socio-cultural, ecological, economic, entrepreneurial and managerial dimensions of providing recreation opportunities.

Prerequisites: PEP A181.

PEP A266 Introduction to Safety and Risk 3 Credits

Introductory course in safety and risk management for outdoor professionals. Covers industry standards and best practices in the areas of planning and decision making to minimize risk in outdoor situations. Discussions will cover accident/incident preventions as well as organization liability for outdoor service providers.

PEP A275 Media and Strategic Communication for Outdoors Professionals 3 Credits

Examines strategic media communication processes and techniques of creative and persuasive message preparation for outdoor professionals in a hands-on field environment. Emphasis on principles and practices of planning and preparing print and electronic media for advertising, public relations, film products and marketing with a particular focus on field-based communications for outdoors professionals. Particular emphasis is placed on utilizing the media outlets of expeditionary Film School of Alaska and the Outdoor Studies department to bring students' projects forward.

PEP A280 Leadership in Health, Physical Education and Recreation 3 Credits

Examines key concepts related to leadership in the HPER fields.

Introduces preparation, short and long-term planning, observation skills, and evaluation skills. Surveys leadership techniques commonly used in the HPER fields.

Special Note: Community service and/or professional development required.

Registration Restrictions: Departmental approval

Prerequisites: PEP A181.

PEP A281 Leadership in Activities for Diverse Populations 2 Credits

Examines key concepts and presents a variety of activities adapted to meet the needs of diverse populations. Presents information and current research related to various disabilities. Examines and applies strategies for promoting physical activity experiences for individuals with special needs.

Registration Restrictions: Departmental approval

Prerequisites: PEP A280.

PEP A282 Leadership in Initiative Activities 2 Credits

Examines key concepts and activities for facilitating experiential leadership, team-building, and personal growth initiatives. Presents a variety of game types, including those designed as icebreakers, de-inhibitizers, team-builders, for cognitive development and for character development. Introduces planning, preparation, props, techniques, leadership, and safety, with an emphasis on facilitation and de-briefing.

Registration Restrictions: Departmental approval

Prerequisites: PEP A280.

PEP A284 Leadership in Fitness Activities 2 Credits

Examines key concepts associated with fitness activities. Presents a variety of topics and activities designed to promote lifetime physical fitness. Evaluates and applies strategies for promoting positive behavior changes for personal health and wellness.

Registration Restrictions: Departmental Approval

Prerequisites: PEP A280.

PEP A285 Leadership in Team Activities 2 Credits

Examines key concepts and activities associated with team activities. Presents a variety of motor skill themes and movement concepts in a progression from the precontrol to the proficiency level. Examines preparation for game play through combining of skills, using skills in more complex ways, and utilizing offensive and defensive strategies.

Registration Restrictions: Departmental approval

Prerequisites: PEP A280.

PEP A286 Leadership in Individual and Dual Activities 2 Credits

Examines key concepts associated with individual and dual activities. Presents a variety of motor skill themes and movement concepts in a progression from the precontrol to the proficiency level. Examines preparation for game play through the combining of skills, using skills in more complex ways, and utilizing offensive and defensive strategies.

Registration Restrictions: Departmental approval

Prerequisites: PEP A280.

PEP A287 Leadership in Outdoor Recreation Activities 2 Credits

Examines key concepts and activities associated with outdoor recreation. Presents a variety of activities such as hiking, camping, canoeing, orienteering, snowshoeing and cross-country skiing. Introduces planning, preparation, equipment, techniques, leadership, environmental ethics, and safety.

Registration Restrictions: Departmental approval

Prerequisites: PEP A280.

PEP A288 Leadership in Rhythmic Activities 2 Credits

Examines key concepts associated with rhythmic activities. Presents a variety of fundamental, rhythmical patterns and movement concepts in a progression from precontrol to proficiency level. Demonstrates rhythmical experiences; folk, ethnic or square dances; creative dance; and educational gymnastics. Combines the mastery of movement skills with the artistry of expression.

Registration Restrictions: Departmental approval

Prerequisites: PEP A280.

PEP A295 Outdoor Leadership Internship 2-3 Credits

Individualized internship intended to provide hands-on experience in the areas of outdoor recreation and leadership adventure tourism, or adventure filmmaking. Internship project focus will vary depending on student interest and internship availability, but in addition to on-site work experience and skill development, students will examine aspects of professionalism and workplace dynamics within one or more of these three areas of the outdoor leadership field. Internships may be paid or unpaid. Students will meet with the instructor throughout the internship to discuss, process, and assess their growth and learning during the course.

Special Note: May be repeated for a maximum of 3 credits.

PEP A345 Incorporating Health and Physical Activity into the Pre-K - 6 Classroom 2 Credits

Examines the relationship between physical activity and learning based on brain research, cooperative learning models, and multiple intelligences. Builds content and behavior knowledge to enhance learning and strategies for making positive behavior changes for elementary education and early childhood majors. Includes a variety of methods and activities for adding physical activity and health into lesson instruction. Emphasizes how key health and physical activity concepts relate to state standards: promotes positive attitudes, working with families, and developmentally appropriate curriculum strategies.

Prerequisites: EDSE A212 or PSY A365.

PEP A346 Lower Body Injury Assessment Skills 3 Credits

Focuses on the recognition and assessment of athletic injuries. Emphasizes lower-body injury assessment skills and proficiencies.

Registration Restrictions: Department approval

Prerequisites: BIOL A111 and BIOL A112 and PEP A251.

PEP A347 Upper Body Injury Assessment Skills 3 Credits

Focuses on the recognition and assessment of athletic injuries. Emphasizes upper-body injury assessment skills and proficiencies.

Registration Restrictions: Department approval

Prerequisites: PEP A346.

PEP A363 Natural History Interpretation and Environmental Education 3 Credits

Introduces skills for reading and interpreting the natural environment. Illustrates geological, biological, and cultural factors to participants or clients. Also covers environmental education strategies and techniques.

Prerequisites: PHIL A303.

PEP A365 Outdoor Leadership Theory and Practice 3 Credits

Presents theories of leadership with emphasis on adventure programming application. Covers leadership styles, power, motivation, followership, group dynamics, diversity, safety and ethics.

Registration Restrictions: Department approval

Prerequisites: PEP A262 and PEP A264 and PEP A280.

PEP A382 Kinesiology and Biomechanics 4 Credits

Analyzes the structure, function and mechanics of human movement with an emphasis on exercise, sports and recreational activities.

Includes application-based laboratory experiences.

Registration Restrictions: Department approval

Prerequisites: BIOL A111 and BIOL A112 and (MATH A121 or MATH A151 or STAT A200).

PEP A383 Movement Theory and Motor Development 3 Credits

Analyzes the process of development in the psychomotor domain. Investigates motor learning theories, physiological foundations of skill performance, motor skill development, environmental effects, application of motor development instructional techniques and measurement processes.

Registration Restrictions: Department approval

Prerequisites: PEP A184.

PEP A384 Cultural and Psychological Aspects of Health and Physical Activity 3 Credits

Investigates the dynamic relationship between psychological issues and health behavior adherence and/or physical activity performance. Analyzes the interaction between physical activity and society.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing.

Prerequisites: PSY A111 or PSY A150.

Attributes: UAA Integrative Capstone GER.

PEP A385 Physiology of Exercise 4 Credits

Analyzes the relationship of physical activity and exercise and the various physiological processes of the human body. Examines the sources and metabolism of energy used to produce movement and other factors that may influence performance.

Registration Restrictions: Department approval

Prerequisites: PEP A382 with a minimum grade of C.

PEP A453 Health Promotion 3 Credits

Focuses on understanding health behaviors and the development of intervention strategies to modify health risk behaviors. Examines various health promotion settings and the role of the health/fitness professional.

Registration Restrictions: Departmental approval, and junior or senior status

Prerequisites: BA A151 and PEP A280.

PEP A454 Exercise Testing and Prescription 4 Credits

Presents techniques necessary for exercise test administration, evaluation and prescription for individuals. Emphasizes clinical physiology, testing protocols, the evaluation of results and the design of individual exercise prescriptions based upon the results.

Registration Restrictions: Department approval, and junior or senior status

Prerequisites: PEP A385 with a minimum grade of C.

PEP A455 Cardiac Rehabilitation and Special Populations 4 Credits

Focuses on exercise as an integral part of medicine by assisting in the diagnosis of cardiovascular disease and by serving as an adjunct to traditional medical practice in the treatment of persons with cardiovascular and other chronic diseases and disabilities. Emphasizes the pathophysiology and detection of diseases, medical management, and exercise therapy program design.

Registration Restrictions: Departmental approval

Prerequisites: PEP A385 and PEP A454.

PEP A456 Contemporary Personal Health Issues 3 Credits

Covers contemporary issues related to personal health. Focuses on subjects such as nutrition, fitness, substance abuse, consumer issues, sexual health, and emotional health issues. Additional topics will reflect concerns related to personal health.

Registration Restrictions: Senior status.

PEP A464 Outdoor Recreation Administration 3 Credits

Analysis of the administration, operation, policies, practices, and procedures of recreation programming and provider organizations. Course includes logistics, public policy, land use/management and permits, personnel recruitment, assignment, training, and evaluation, resource allocation, risk management, insurance, and scheduling. Examines development of organizational mission, values, strategic planning, funding sources, and facilities.

Prerequisites: PEP A181 and PEP A262 and PEP A264 and PEP A280.

PEP A467B Climbing-Based Outdoor Leadership 2 Credits

Presents techniques and strategies of outdoor leadership in the alpine or climbing environment. Emphasizes application of leadership skills in field-based experiences. Covers planning, organization, logistics, rope systems, anchors, environmental considerations, decision making, judgment, and safety.

Registration Restrictions: Department approval

Prerequisites: PER A146 and PER A147 and (PER A148 or PER A181) and PEP A365.

PEP A467C Land-Based Outdoor Leadership 2 Credits

Presents techniques and strategies of terrestrial-based outdoor leadership in all seasons. Emphasizes application of leadership skills in field-based experiences. Covers planning and organization, logistics, campcraft, environmental considerations, decision making and judgment, and safety.

Registration Restrictions: Department approval

Prerequisites: ((PER A168 and PER A170) or (PER A169)) and PEP A365.

PEP A467D Water-Based Outdoor Leadership 2 Credits

Presents techniques and strategies of water-based outdoor leadership. Emphasizes application of leadership skills in field-based experiences. Covers planning, organization, logistics, lead paddling considerations, environmental considerations, decision making, judgement and safety.

Registration Restrictions: Department approval

Prerequisites: (PER A151 or PER A152 or PER A153) and PEP A365.

PEP A486 Standards and Assessment in Health, Physical Education, and Recreation 3 Credits

Emphasizes program development and planning based on national, state, and local standards in health, physical education, recreation, and adventure leadership. Applies appropriate strategies to assess program and client success.

Prerequisites: PEP A280 and (MATH A121 or MATH A151 or STAT A200).

PEP A487 Administration and Supervision in Health, Physical Education and Recreation 3 Credits

Critiques and evaluates the technical, leadership, and supervisory skills necessary to safely and effectively administer health, physical education and recreation programs. Theoretical, practical, and research perspectives will be presented.

Prerequisites: BA A151 and PEP A280.

PEP A490 Selected Topics in Health, Physical Education and Recreation 1-6 Credits

Examines selected topics in the health, physical education and recreation industry according to industry demand or faculty expertise.

Special Note: Prerequisites may be required depending on selected topic. Course may be repeated with change in topic.

Registration Restrictions: Department approval

PEP A495 Internship 6 Credits

Advanced professional experience in an approved position with supervision and training in health, physical education and recreation programming.

Special Note: Special clothing and equipment may be required.

Registration Restrictions: Successful completion of a minimum of 12 hours of upper-division concentration-specific courses; a grade of C or better in all physical education professional (PEP) courses with a minimum GPA of 2.75; instructor approval; current CPR/First Aid certification required for internship placement; admission to BS in PE; senior status.

PEP A497 1-3 Credits**PEP A645 Methods in Elementary Physical Education 3 Credits**

Applies theory and practice necessary for facilitating learning, providing positive behavioral supports, evaluating programs, and developing curriculum within the elementary physical education classroom ecology.

Special Note: Concurrent enrollment in an internship is required.

Registration Restrictions: Departmental approval.

Prerequisites: EDFN A478 and EDFN A602.

PEP A646 Methods in Secondary Physical Education 3 Credits

Applies theory and practice necessary for facilitating learning, providing positive behavioral supports, evaluating programs, and developing curriculum within the secondary physical education classroom ecology.

Special Note: Concurrent enrollment in an internship is required.

Registration Restrictions: Departmental approval.

Prerequisites: EDFN A478 and EDFN A602.

Physical Therapist Assistant (PTA)

Courses

PTA A101 Fundamentals of Physical Therapy 2 Credits

Introduces the profession of physical therapy, to include the history, scope of practice, professionalism, the American Physical Therapy Association (APTA), ethical behavior, the health care team, interpersonal communication and documentation in a medical record.

Registration Restrictions: Departmental approval

PTA A105 Tests and Measures 3 Credits

Introduces common standardized tests and measures used to determine the interventions required for the plan of care developed by the supervising physical therapist.

Registration Restrictions: Departmental approval

PTA A110 Kinesiology and Biomechanics 3 Credits

Presents human anatomy with an emphasis on the musculoskeletal system, identification of structures and their relationship to function, normal and abnormal biomechanical principles of joint patterns and gait. Explores human movement during performance of activities, especially the geometry of movement (kinematics) and the forces influencing movement (kinetics).

Registration Restrictions: Departmental approval

PTA A120 Rehabilitation I 3 Credits

Introduces the clinical manifestations and common management strategies for diseases/disorders of the musculoskeletal, endocrine, integumentary, cardiovascular and pulmonary systems as they pertain to physical therapy interventions.

Registration Restrictions: Departmental approval

PTA A130 Physical Therapy Interventions I 4 Credits

Introduces adaptive/assistive devices and equipment, gait training, activities of daily living (ADLs), wheelchair skills, isolation/standard precautions, aseptic technique, draping, transfers, passive range of motion (PROM), and mechanical modalities.

Registration Restrictions: Departmental approval

PTA A150 Psychosocial Aspects of Health Care 2 Credits

Introduces health-related human behavior to include coping and adjustment behaviors in acute and chronic illness, and the role that culture and family systems play in response to illness or injury.

Registration Restrictions: Departmental approval

PTA A195 Clinical Practicum I 1 Credit

Provides the Physical Therapist Assistant student an opportunity to observe and participate in a structured clinical setting under the supervision of a licensed physical therapist or physical therapist assistant. Provides an opportunity for the student to perform tests and interventions, and apply critical thinking skills developed in prior coursework.

Registration Restrictions: Departmental approval

Prerequisites: PTA A130 with a minimum grade of C and PTA A150 with a minimum grade of C.

PTA A210 Therapeutic Exercise 4 Credits

Introduces exercise as a preventive and treatment mechanism for pathological conditions that influence strength, endurance and flexibility of the human body. Emphasis is placed upon design and application of exercise, developmental sequence of exercise, types of exercise, and the use of exercise equipment. Includes the body's physiological response to exercise.

Registration Restrictions: Departmental approval

Prerequisites: PTA A105 with a minimum grade of C and PTA A110 with a minimum grade of C.

PTA A220 Rehabilitation II 3 Credits

Introduces the clinical manifestations and common management strategies for diseases/disorders of the neurological, immune, lymphatic, hepatic/biliary, hematologic, gastrointestinal and genitourinary systems as they pertain to physical therapy interventions.

Registration Restrictions: Departmental approval

Prerequisites: PTA A120 with a minimum grade of C.

PTA A230 Physical Therapy Interventions II 4 Credits

Introduces physical therapy interventions including management of integumentary pathologies, use of physical agents, environmental safety and accessibility evaluations, prosthetics and orthotics, and select manual therapy interventions.

Registration Restrictions: Department approval

Prerequisites: PTA A130 with a minimum grade of C.

PTA A250 Neurological Interventions Across the Lifespan 3 Credits

Introduces fundamentals of growth, development and aging, with implications for physical therapy. Focuses on neurological interventions used throughout the lifespan for individuals with abnormal development, neurological injuries and neurological disorders.

Registration Restrictions: Departmental approval

PTA A292 Physical Therapist Assistant Seminar 2 Credits

Prepares the student for transition into the workforce. Includes discussion of the national Physical Therapist Assistant (PTA) exam, employment, Alaska practice act, professional development, employment opportunities and community service. Presents challenges and opportunities involved with providing physical therapy in the state of Alaska.

Registration Restrictions: Departmental approval

Prerequisites: PTA A195 with a minimum grade of P.

PTA A295A Clinical Practicum II 5 Credits

Provides continued supervised physical therapy experience in a health care setting.

Registration Restrictions: Departmental approval

Prerequisites: PTA A195 with a minimum grade of P.

PTA A295B Clinical Practicum III 5 Credits

Provides continued supervised physical therapy experience in a health care setting.

Registration Restrictions: Departmental approval

Prerequisites: PTA A295A with a minimum grade of P.

Physics (PHYS)

Courses

PHYS A101 Physics for Poets 3 Credits

Introduces liberal arts students to the theory, methods and techniques of physics, the most basic of the sciences. Provides broad exposure to many aspects of physics, including celestial mechanics, quantum theory, relativity, and cosmology, as well as the scientific method.

Special Note: Does not fulfill the natural sciences component of the CAS B.S. degree.

Registration Restrictions: If the prerequisite is not satisfied, an approved UAA placement test is required.

Prerequisites: MATH A105 with a minimum grade of C.

Attributes: UAA Natural Sciences GER.

PHYS A115 Physical Science 3 Credits

Exposes students to basic concepts in physics. Presents general knowledge of science rather than an in-depth study of any one field.

Registration Restrictions: Placement into MATH A105 or higher.

PHYS A115L Physical Science Lab 1 Credit

Exposes students to basic concepts in physics labs. Presents general knowledge of science rather than an in-depth study of any one field.

Prerequisites: PHYS A115 or concurrent enrollment.

PHYS A123 Basic Physics I 3 Credits

Non-calculus introduction to mechanics (including motion, forces, energy, gravitation and rotation), fluids, and thermodynamics.

Prerequisites: MATH A105 or ALEKS Overall Test 1 with a score of 055 or ALEKS Overall Test 2 with a score of 055 or ALEKS Overall Test 3 with a score of 055 or ALEKS Overall Test 4 with a score of 055 or ALEKS Overall Test 5 with a score of 055.

Attributes: UAA Natural Sciences GER.

PHYS A123L Basic Physics I Laboratory 1 Credit

Introductory physics laboratory with experiments in mechanics, fluids and thermodynamics.

Prerequisites: PHYS A123 with a minimum grade of C or concurrent enrollment.

Attributes: UAA Natural Sci Lab Only GER.

PHYS A123R Basic Physics I Problem Solving 1 Credit

Techniques of problem solving for material covered in PHYS A123.

Includes student discussion and presentation of solutions.

Corequisites: PHYS A123.

PHYS A124 Basic Physics II 3 Credits

Non-calculus introduction to electricity and magnetism, waves, optics, light, some modern and nuclear physics.

Prerequisites: PHYS A123 with a minimum grade of C.

Attributes: UAA Natural Sciences GER.

PHYS A124L Basic Physics II Laboratory 1 Credit

Introductory physics laboratory with experiments in electricity and magnetism, waves, and optics.

Prerequisites: (PHYS A123 with a minimum grade of C and PHYS A123L with a minimum grade of C) and PHYS A124 with a minimum grade of C or concurrent enrollment.

Attributes: UAA Natural Sci Lab Only GER.

PHYS A124R Basic Physics II Problem Solving 1 Credit

Techniques of problem solving for material covered in PHYS A124.

Includes student discussion and presentation of solutions.

Corequisites: PHYS A124.

PHYS A130 Survey of College Physics 3 Credits

Introduction to core principles of physics in classical mechanics, waves, electricity and magnetism, and optics. Specifically designed to prepare students for entry into calculus based physics.

Prerequisites: MATH A152.

PHYS A211 General Physics I 3 Credits

Calculus-based introduction to classical mechanics, including: kinematics, Newton's Laws, momentum, work, energy, gravity, rotational motion, oscillations and fluids.

Special Note: PHYS A211L is a separate laboratory course.

Prerequisites: MATH A251 with a minimum grade of C and

MATH A252 with a minimum grade of C or concurrent enrollment.

Corequisites: PHYS A211R.

Attributes: UAA Natural Sciences GER.

PHYS A211L General Physics I Laboratory 1 Credit

Calculus-based introductory physics laboratory with experiments in computerized data collection and analysis, mechanics, waves, elasticity and wave motion.

Prerequisites: PHYS A211 with a minimum grade of C or concurrent enrollment.

Attributes: UAA Natural Sci Lab Only GER.

PHYS A211R General Physics I Problem Solving 0 Credits

Techniques of problem solving for material covered in PHYS A211.

Includes student discussion and presentation of solutions in a small-group setting.

Corequisites: PHYS A211.

PHYS A212 General Physics II 3 Credits

Calculus-based introduction to classical physics, including: Coulomb's Law, electrical potential, electric circuits, capacitance, Kirchoff's Laws, Biot-Savart Law, Faraday's Law and electromagnetic waves.

Special Note: Additional topics include waves and sound.

PHYS A212L is a separate laboratory course.

Prerequisites: MATH A252 with a minimum grade of C and

MATH A253 with a minimum grade of C or concurrent enrollment and PHYS A211 with a minimum grade of C.

Attributes: UAA Natural Sciences GER.

PHYS A212L General Physics II Laboratory 1 Credit

Calculus-based introductory physics laboratory with experiments in electric and magnetic fields, geometric and physical optics, and light.

Prerequisites: PHYS A211 with a minimum grade of C and

PHYS A211L with a minimum grade of C and PHYS A212 with a minimum grade of C or concurrent enrollment.

Attributes: UAA Natural Sci Lab Only GER.

PHYS A212R General Physics II Problem Solving 1 Credit

Techniques of problem solving for material covered in PHYS A212. Includes student discussion and presentation of solutions.

Special Note: This course does not meet General Education Requirements.

Corequisites: PHYS A212.

PHYS A214 Waves, Thermodynamics and Electricity 3 Credits

Calculus-based study of waves and sound, thermodynamics, and electricity, including electrical circuits.

Prerequisites: MATH A252 with a minimum grade of C and MATH A253 with a minimum grade of C or concurrent enrollment and PHYS A211 with a minimum grade of C.

PHYS A214L Waves, Thermodynamics and Electricity Laboratory 1 Credit

Calculus-based introductory physics laboratory with experiments in waves and sound, electric fields, circuits, and thermodynamics.

Registration Restrictions: If the equivalent of PHYS A214 is taken from another institution, it must be completed prior to taking PHYS A214L.

Prerequisites: PHYS A211 with a minimum grade of C and PHYS A211L with a minimum grade of C and PHYS A214 with a minimum grade of C or concurrent enrollment.

PHYS A303 Modern Physics 3 Credits

Introduction to modern physics, primarily special relativity and quantum mechanics. Applications of these topics to the quantum structure of atoms, molecules, and solids; lasers; nuclear/particle physics and cosmology.

Prerequisites: MATH A302 with a minimum grade of C and PHYS A212 with a minimum grade of C.

PHYS A311 Intermediate Classical Mechanics 3 Credits

Newtonian, Lagrangian, and Hamiltonian mechanics, dynamics of systems of particles and rigid bodies.

Prerequisites: MATH A302 with a minimum grade of C and PHYS A212 with a minimum grade of C.

PHYS A314 Electromagnetics 3 Credits

Electromagnetic theory and applications. Static fields in free space and material media; steady current systems and associated magnetic effects. Includes magnetostatics, Maxwell's Equations, electromagnetic radiation, transmission lines and relativity.

Crosslisted With: EE A314.

Prerequisites: PHYS A212 and PHYS A212L and MATH A302.

PHYS A320 Simulation of Physical Systems 3 Credits

Introduces methods of computer simulation with diverse applications in physics such as numerical integration of Newton's equation, cellular automata, random walks, Monte Carlo methods, percolation and the dynamics of many body systems. No prior programming experience is required.

Prerequisites: MATH A252 with a minimum grade of C and (PHYS A124 with a minimum grade of C or PHYS A212 with a minimum grade of C).

PHYS A324 Electromagnetics II 3 Credits

Use of Maxwell's equations in analysis of plane wave propagation, wave reflection, radiation and antennas, waveguides, cavity resonators, transmission lines, and radio propagation.

Crosslisted With: EE A324.

Prerequisites: (EE A314 or PHYS A314) and MATH A302.

PHYS A362 Optics 4 Credits

Interaction of light with matter: theory of geometric and nonlinear optics, Fourier optics, coherence theory, lasers, and additional topics of interest. Practical experience with relevant theories through laboratory projects including investigation of diffraction, interference and polarization. Design and construction of a telescope, a microscope and an interferometer.

Prerequisites: PHYS A212 with a minimum grade of C and PHYS A212L with a minimum grade of C.

PHYS A381 Advanced Physics Laboratory 3 Credits

Theory and practical application of topics in upper-division physics, using advanced laboratory experiments and techniques with statistical and error analysis of data.

Prerequisites: PHYS A303 with a minimum grade of C or concurrent enrollment.

PHYS A403 Quantum Mechanics 4 Credits

Fundamentals of quantum mechanics including applications to the hydrogen atom, particle spin and perturbation theory.

Special Note: Not available for credit to students who have completed PHYS A603.

May Be Stacked With: PHYS A603

Prerequisites: (CHEM A332 with a minimum grade of C or PHYS A303 with a minimum grade of C) and MATH A314 with a minimum grade of C.

PHYS A413 Statistical and Thermal Physics 4 Credits

Principles of applications of statistical mechanics and thermodynamics.

Special Note: Not available for credit to students who have completed PHYS A613.

May Be Stacked With: PHYS A613

Prerequisites: PHYS A212 with a minimum grade of C.

PHYS A456 Nonlinear Dynamics and Chaos 3 Credits

An introduction to nonlinear dynamics and chaos. Concrete examples from physics, biology, chemistry, and engineering are used to develop analytical methods and geometric intuition. Topics covered include phase plane analysis, iterated maps, fractals, and strange attractors.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and junior standing.

Crosslisted With: BIOL A456 and CHEM A456

Prerequisites: MATH A253 with a minimum grade of C and (PHYS A124 with a minimum grade of C or PHYS A212 with a minimum grade of C).

Attributes: UAA Integrative Capstone GER.

PHYS A490 Special Topics in Physics 1-4 Credits

Detailed study of a selected topic in physics.

Special Note: May be repeated for credit with a change of topic for a maximum of 12 credits. Not available for credit to students who have completed PHYS A690 with the same topic.

May Be Stacked With: PHYS A690

Prerequisites: PHYS A303 with a minimum grade of C.

PHYS A498 Individual Research 1-6 Credits

Research projects to be arranged with individual faculty members who will direct the research program.

Special Note: May be repeated for a maximum of 6 credits.

Registration Restrictions: Department permission.

PHYS A603 Advanced Quantum Mechanics 4 Credits

Mathematical foundations of quantum mechanics and advanced applications to the hydrogen atom, particle spin and perturbation theory. Includes review of current literature and/or independent research on the topic.

Special Note: Not available for credit to students who have completed PHYS A403.

Registration Restrictions: Graduate standing and approval of faculty advisor.

May Be Stacked With: PHYS A403

PHYS A613 Advanced Statistical and Thermal Physics 4 Credits

Principles and advanced applications of statistical mechanics and thermodynamics. Include review of current literature and/or independent research on the topic.

Special Note: Not available for credit to students who have completed PHYS A413.

Registration Restrictions: Graduate standing and approval of faculty advisor.

May Be Stacked With: PHYS A413

PHYS A690 Advanced Special Topics in Physics 1-4 Credits

Detailed study of a selected topic in physics at the graduate level. Includes review of current literature and/or independent research on the topic.

Special Note: May be repeated with change of topic for a maximum of 12 credits. Not available for credit to students who have completed PHYS A490 with the same topic.

Registration Restrictions: Graduate standing and approval of faculty advisor.

May Be Stacked With: PHYS A490

PHYS A698 Graduate Individual Research 1-6 Credits

Research projects to be arranged with individual faculty members who will direct the research program.

Special Note: May repeated for a maximum of 12 credits.

Registration Restrictions: Graduate standing and approval of faculty advisor

PHYS A699 Thesis 1-6 Credits

Planning, preparation and completion of a master's-level thesis.

Special Note: May repeated for a maximum of 12 credits.

Registration Restrictions: Graduate standing and approval of faculty advisor

Courses**PS A101 Introduction to American Government 3 Credits**

An introduction to the historical and constitutional foundations of American government; the political activities of parties, groups, and the media; public decision-making by the executive, Congress, and the courts; and current economic, environmental, social, and foreign issues and policies.

Attributes: UAA Social Sciences GER.

PS A102 Introduction to Political Science 3 Credits

The exploration of basic principles and processes of major branches of the discipline of political science, including American government, comparative politics, international relations and political philosophy.

Attributes: UAA Social Sciences GER.

PS A290 Topics in Politics 1-3 Credits

Introductory-level examination of current or ongoing topic of interest related to one or more sub-fields within political science.

Special Note: May be repeated up to five times for credit with change of title for maximum of 6 credits.

PS A301 Comparative Political Economy 3 Credits

Explores how political power shapes economic outcomes and how economic forces influence political action. Includes an introduction to the prominent theories of international political economy (IPE), describes IPE institutions, and presents and analyzes global trade and development theories and other contemporary challenges to IPE.

Prerequisites: PS A102.

PS A311 Comparative Politics 3 Credits

Introduction to the development of governmental structures and political processes in the modern world. Theories are related to problems and governing strategies in contemporary political systems.

Prerequisites: WRTG A111 and (PS A101 or PS A102).

Attributes: UAA Social Sciences GER.

PS A312 Comparative Northern Politics 3 Credits

Detailed comparative analysis of political systems, political actors, and political institutions across the northern region, to contrast such entities and evaluate the complex range of issues relevant to the region and the international community.

Prerequisites: WRTG A111 or PS A102.

PS A313 Tribes, Nations and Peoples 3 Credits

Analyzes and evaluates the history of expansion, invasion, contemporary questions, and issues that confront indigenous tribes, nations and peoples, including their political, social, economic, and cultural activities. Investigates corresponding relations with non-indigenous governments and private entities as well as international developments concerning indigenous human rights.

Crosslisted With: AKNS A313

Prerequisites: AKNS A201 with a minimum grade of C or PS A102 with a minimum grade of C.

Political Science (PS)

PS A321 International Relations 3 Credits

An introduction to international relations providing general knowledge and analytical tools necessary to understand, evaluate and respond to an increasingly complex array of international problems and international affairs. Includes theoretical approaches to international relations and how theory influences expectations.

Prerequisites: PS A102.

PS A322 United States Foreign Policy 3 Credits

Examines the heritage of United States foreign policy, the processes involved in the formation and implementation of policy, and the environment in which these factors occur.

Prerequisites: PS A101 or PS A102.

PS A323 International Organizations 3 Credits

Introduction to the theory and practice of international organizations.

Prerequisites: PS A101 or PS A102.

PS A324 Model United Nations 3 Credits

Student simulation of the United Nations. Acting as nation-state delegates, students research and debate a topic of international concern.

Special Note: May be repeated once for credit.

PS A325 Northeast Asia in 21st Century 3 Credits

An interdisciplinary examination and analysis of Northeast Asia covering China, the Koreas, and Japan designed to provide students with the means to understand how the societies of this region have developed separate and distinct identities despite their common cultural and philosophic roots.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses.

Crosslisted With: HIST A325 and INTL A325

Attributes: UAA Integrative Capstone GER.

PS A330 The American Political Tradition 3 Credits

The political theory of liberal democracy examined in its application to crucial events in American political history, with emphasis on the American founding era.

Prerequisites: WRTG A111 and (HIST A101 or PS A101).

PS A331 Political Philosophy 3 Credits

An introduction to political philosophy, with emphasis on the study of regimes; selected regimes are examined through the writings of political philosophers.

Prerequisites: WRTG A111.

Attributes: UAA Humanities GER.

PS A332 History of Political Philosophy I: Classical 3 Credits

Political philosophy from Plato to Marsilius, with emphasis on natural right.

Prerequisites: WRTG A111.

Attributes: UAA Humanities GER.

PS A333 History of Political Philosophy II: Modern 3 Credits

Political philosophy from Machiavelli to Nietzsche, with emphasis on liberalism and its critics.

Prerequisites: WRTG A111.

Attributes: UAA Humanities GER.

PS A341 The United States Congress 3 Credits

Examines the organization of the U.S. Congress and its role in the American political system. Topics include theories of representative government, the internal dynamics of Congress, and forces that influence its ability to act within the constitutional system.

Prerequisites: PS A101.

PS A342 The American Presidency 3 Credits

Examines executive branch of the U.S. government. Course focuses on the constitutional design and evolution of the office, theories of presidential power, relations with Congress, and contemporary presidential policymaking.

Prerequisites: PS A101.

PS A343 Constitutional Law 3 Credits

Introduces students to American constitutional law through a study of the history of the Constitution and selected landmark Supreme Court cases. Topics covered are separation of powers, judicial review, civil rights and liberties, property and economic rights and others.

Crosslisted With: JUST A343.

Prerequisites: PS A101 or JUST A110.

PS A345 Alaska Government and Politics 3 Credits

Examines all forms of governmental structures and political processes in Alaska. Examines the history of government in Alaska, contemporary political issues and political change.

Special Note: May be applied to the Alaska Culture and History requirements for state of Alaska teacher recertification.

Prerequisites: PS A101.

PS A346 Alaska Native Politics 3 Credits

Introduction to historical relationships among federal, territorial, state and local laws and policies as they affect Alaska Natives and Native/non-Native relations. Includes contemporary issues and comparative case studies.

Special Note: May be used to fulfill the Alaska studies requirement for teacher certification.

Registration Restrictions: Upper division standing

Crosslisted With: AKNS A346

PS A347 Public Administration 3 Credits

An introduction to the problems of managing agencies and implementing policies in local, state, and federal government. History and current practices of public administration and the effects of the social, economic, and political environments on administration, with an emphasis on Alaska.

Prerequisites: PS A101 or PS A102.

PS A351 Political Sociology 3 Credits

Introduction to the social aspects of politics and the nature and distribution of power in society. Examination of the dynamic relationship of the political process and the institutions of society.

Crosslisted With: SOC A351.

Prerequisites: (WRTG A211 or WRTG A212 or WRTG A213 or WRTG A214) and (PS A102 or SOC A101).

Attributes: UAA Social Sciences GER.

PS A353 American Political Development 3 Credits

Examines development of national political institutions in the United States.

Prerequisites: PS A101 with a minimum grade of C or PS A102 with a minimum grade of C.

PS A355 Women in Politics 3 Credits

Examines the roles of women in the political world from local, state, national and international perspectives. The nature of women's political roles will be studied from both historical and contemporary perspectives.

Crosslisted With: WS A355

Prerequisites: PS A101 or PS A102 or WS A200.

PS A361 Social Science Research Methods 3 Credits

Provides a firm grounding in rigorous and ethical social science research. Examines various social science research methods, including surveys, experiments, content analyses, interviews and focus groups, and explores methodological challenges, such as hypothesis testing, measurement issues and sampling strategies.

Crosslisted With: SOC A361

Prerequisites: PS A102 or SOC A101.

PS A490 Studies in Politics 1-3 Credits

An examination of an aspect of politics from the perspective of a major field in the political science discipline (comparative politics, international relations, political philosophy, American politics and political behavior). Field and subject studied will vary from year to year.

Special Note: Subtitle varies; may be repeated with different subtitles.

Registration Restrictions: Junior standing

May Be Stacked With: PS A690

Prerequisites: PS A101 or PS A102.

PS A492 Senior Seminar in Politics 3 Credits

Senior integrative capstone course required of all political science majors. An examination of a single major problem in the study of politics.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses. Senior standing and at least one upper-division course from another social science.

Attributes: UAA Integrative Capstone GER.

PS A495 Internship in Political Science 3 Credits

Students apply the subject matter of political science in an agency or community setting.

Special Note: Internships vary; may be repeated once for credit with a different internship.

Registration Restrictions: Junior standing. Faculty permission required.

Prerequisites: PS A101 or PS A102.

PS A690 Studies in Politics 1-3 Credits

An examination of an aspect of politics from the perspective of a major field in the political science discipline (comparative politics, international relations, political philosophy, American politics, and political behavior). Field and subject studied will vary from year to year.

Special Note: Subtitle varies; may be repeated with different subtitles.

May Be Stacked With: PS A490

Prerequisites: PS A101 or PS A102.

Preparatory English (PRPE)

Courses

PRPE A050 ESL Basic Conversation Skills 3 Credits

For high-level beginning to low-level intermediate students. Improves vocabulary acquisition and usage and the ability to communicate orally in everyday and academic situations by developing Standard American English language listening and speaking skills.

Special Note: Student entering this course must have an advising slip signed by faculty. Call the Testing Center for appointment times. May be repeated one time for credit.

PRPE A051 ESL Basic Reading and Writing 3 Credits

For high-level beginning to low-level intermediate students. Emphasizes Standard American English basic grammar rules, improves writing ability, and increases reading comprehension in academic and everyday situations. Provides instruction in formatting written work, word processing, and using the dictionary as a grammar resource.

Special Note: Student entering this course must have an advising slip signed by faculty. Call the Testing Center for appointment times. May be repeated one time for credit.

PRPE A054 Learning Strategies 1-3 Credits

Presents basic learning strategies. Develops time management, learning styles, textbook study, note taking, and test taking skills.

Registration Restrictions: Appropriate score on reading placement test.

PRPE A070 Basic Reading 2-4 Credits

Improves basic reading skills with guided, structured practice in vocabulary, comprehension, and reading flexibility.

Special Note: Concurrent enrollment in WRTG A080 is strongly recommended.

Registration Restrictions: Appropriate score on English placement test.

PRPE A072 Individualized Reading Lab 1-3 Credits

Provides individualized instruction in basic reading skills, text comprehension, vocabulary development, dictionary skills, and readjustment of reading rate, in an open lab format.

Special Note: May be repeated for a maximum of 3 credits.

Registration Restrictions: Appropriate score on reading placement test.

PRPE A074 Vocabulary Skill Building 1-3 Credits

Provides tools for vocabulary growth. Includes word recognition drills, practice exercises, writings, word roots, prefixes, and origins, use of the dictionary, and word searches on the computer.

Prerequisites: ASSET Reading Skills with a score of 30.

PRPE A075 Speed Reading 1-3 Credits

Introduces skills to increase reading speed and comprehension. Presents techniques for efficient reading of different types of material.

Registration Restrictions: Appropriate score on reading placement test.

PRPE A076 Reading Strategies 3 Credits

Provides basic strategies for reading comprehension, vocabulary development, and textbook skills necessary for success in freshman college classes.

Registration Restrictions: Appropriate score on reading placement test.

PRPE A084 Sentence Skills 1-3 Credits

Supports students in composition courses. Provides tools for improving sentences that conform to Standard American English. Focuses on common sentence errors for accuracy in drafting and editing.

Registration Restrictions: Appropriate score on English placement test.

PRPE A105 Introduction to College Study Skills 1-3 Credits

Introduces study skills necessary for success in college-level courses. Presents strategies for information processing, lecture and textbook note-taking, and test-taking in academic settings.

Registration Restrictions: If prerequisite is not satisfied, then appropriate score on reading placement test is required.

Prerequisites: PRPE A076 with a minimum grade of C.

PRPE A107 Introduction to College Reading 3 Credits

Improves literal and critical reading skills, academic vocabulary, and textbook comprehension and retention. Explores the connection between reading and writing needed for success in college classes.

Registration Restrictions: If prerequisite is not satisfied, then appropriate score on reading placement test is required.

Prerequisites: PRPE A076 with a minimum grade of C.

Process Technology (PRT)

Courses

PRT A101 Introduction to Process Technology 3 Credits

Introduction to industrial process operations through an overview of general information, processes, procedures and equipment.

PRT A110 Introduction to Process Safety, Health and Environmental Awareness 3 Credits

Introduction to safety, health and environmental awareness within the process industry. Examines types of hazards and applicable government regulations, and current industry standards and practices. Analyzes the potential for harm to an individual and to the environment due to unsafe conditions. Covers various types of preventative procedures, systems and equipment.

PRT A130 Process Technology I: Equipment 4 Credits

Examines various types of process equipment through an in-depth analysis of construction, components and operation. Covers process flows, piping diagrams, economic impact, plus safety and environmental aspects. Surveys preventative maintenance and troubleshooting procedures.

Registration Restrictions: Admitted students in Process Technology AAS, Industrial Process Instrumentation AAS, Petroleum Technology Undergraduate Certificate or Mechanical Technology Undergraduate Certificate

Prerequisites: PRT A101 and MATH A105 or concurrent enrollment.

PRT A140 Industrial Process Instrumentation I 3 Credits

Introduction to the terminology and symbolism encountered in process instrumentation. The common process variable measurement tools used industrially are explored.

Registration Restrictions: Degree-seeking Process Technology or Industrial Process Instrumentation students.

Prerequisites: MATH A105 or concurrent enrollment.

PRT A144 Industrial Process Instrumentation II 3 Credits

Introduction to continuous control strategies and final control elements utilized for process control. The use of discrete alarm and shutdown systems is also introduced. Shop experiences provide the opportunity to understand pneumatic measurement, transmission, and control functions.

Registration Restrictions: Degree-seeking Process Technology or Industrial Process Instrumentation students.

Prerequisites: PRT A140.

PRT A160 Oil and Gas Exploration and Production I 3 Credits

Surveys oil and gas exploration, reservoir geology, and aspects of petroleum mineral leasing. Covers drilling and production technologies, completion systems, and methods of crude delivery. Surveys emulsion hazards and treatment. Covers natural gas production and tar sands production. Examines current marketing strategies and reviews the theory of peak oil.

Registration Restrictions: Admitted students in the Petroleum Technology Undergraduate Certificate or Process Technology AAS

PRT A170 Renewable Energy Production and Operation 3 Credits

Surveys renewable energy production systems and their operation. Includes technical development, economic viability, grid integration, energy storage, and location issues. Overview of Alaska renewable energy production systems.

Prerequisites: MATH A055.

PRT A230 Process Technology II: Systems 4 Credits

Examines how individual components interact as part of a specific process system. Covers how specific process systems integrate and function within a process facility. Reviews the scientific principles incorporated in the proper working of process systems. Surveys a selection of process industries with emphasis directed toward those located in Alaska.

Registration Restrictions: Admitted students in the Process Technology AAS, Industrial Process Instrumentation AAS or Petroleum Technology Undergraduate Certificate

Prerequisites: PRT A130 and PRT A140.

PRT A231 Process Technology III: Operations 4 Credits

Analyzes the operator duties and responsibilities that occur in a process operation with emphasis focused on the unit (outside) operator position. Examines the different operational phases found in a process operation. Covers the operation of a variety of Alaska process industries and an overview of their operator duties.

Registration Restrictions: Admitted students in the Process Technology AAS or Petroleum Technology Undergraduate Certificate
Prerequisites: PRT A144 and PRT A230 and PRT A250 or concurrent enrollment.

PRT A250 Process Troubleshooting 3 Credits

Introduces the concept of troubleshooting and analyzes how instrumentation such as indicators, variables and controllers can be used for effective troubleshooting. Develops troubleshooting skills that can be used effectively throughout the process industry.

Registration Restrictions: Admitted students in the Process Technology AAS, Petroleum Technology Undergraduate Certificate or Industrial Process Instrumentation AAS

Prerequisites: PRT A144 or concurrent enrollment and PRT A230.

PRT A255 Quality Concepts for the Process Industry 1 Credit

Examines quality concepts, tools and methods used in the process industry and covers the effectiveness of their implementation and continued use. Investigates root cause analysis problem solving techniques. Examines methods necessary to facilitate effective teams and teamwork interaction.

Registration Restrictions: Admitted students in the Process Technology AAS

Prerequisites: PRT A230 or concurrent enrollment.

PRT A280 Industrial Petrochemical Processes 3 Credits

Surveys industrial petrochemical reaction processes, catalysis and aspects of petrochemical productions. Covers industrial start-up and production technologies, shared systems, and methods of industrial chemical processes. Surveys safety hazards and environmental impacts. Covers natural gas reforming and chemical reaction processes, and examines current marketing and shipping strategies.

Registration Restrictions: Admitted students in the Petroleum Technology Undergraduate Certificate, Process Technology AAS or Industrial Process Instrumentation AAS

Prerequisites: PRT A230 with a minimum grade of C.

Project Management (PM)

Courses

PM A401 Project Management Fundamentals 3 Credits

Develops fundamentals of project management to initiate, plan, execute, monitor, control and close projects in different organizational and industry contexts. Alignment with strategic and operational objectives and stakeholder requirements. Hands-on application of tools and methodologies. Interactive and collaborative learning environment emphasizes communication, leadership, teamwork and professionalism.

Special Note: Not available for credit to students who have completed PM A601.

May Be Stacked With: PM A601

PM A402 Application of Project Management Processes 3 Credits

Applies project management processes from project inception through closeout. Integrates project management processes through use of hands-on, end-to-end project case studies. Covers project leadership, project requirements definition, stakeholder management, change control, schedule management, risk management, professional responsibility, effective communication, and teamwork.

Special Note: Not available for credit to students who have completed PM A602.

May Be Stacked With: PM A602

Prerequisites: PM A401 with a minimum grade of C or concurrent enrollment.

PM A412 Advanced Project Time Management 3 Credits

Introduce, adapt and apply advanced project scheduling and time management processes to effectively achieve on-time project completion. Processes include defining project activity sequencing, estimating activity effort and duration, project schedule development and control. Utilizes project management applications for scheduling, scope definition and activity sequencing will be utilized in these processes.

Special Note: Not available for credit to students who have completed PM A612.

May Be Stacked With: PM A612

Prerequisites: PM A401 with a minimum grade of C and PM A402 with a minimum grade of C.

PM A430 Systems Engineering Fundamentals 3 Credits

Explores the systems engineering process from requirements to functional analysis and solution architecture. Analyzes the process, methods and tools for the orchestration of work in multiple project disciplines and the integration of logistics throughout the entire project or product life cycle.

Special Note: Not available for credit to students who have completed PM A630.

May Be Stacked With: PM A630

Prerequisites: PM A401 with a minimum grade of C.

PM A494S Lean Six Sigma Green Belt 3 Credits

Fundamentals of Lean Six Sigma (LSS) necessary to prepare individuals to implement principles and practices of LSS using fact-based and data-driven methodologies to improve the customer experience, reduce waste and add unique value. Develop leadership and teaming skills necessary to facilitate efforts by teams and work groups to produce tangible results in support of strategic and operational objectives of organizations. Hands-on application of LSS and project management processes, tools and techniques to case studies and real projects will prime individuals to lead and facilitate process improvement projects to produce tangible results in support of strategic and operational objectives of organizations. Interactive and collaborative learning environment emphasizes communication, leadership, cross-functional teamwork and professionalism.

May Be Stacked With: A694S

PM A601 Project Management Fundamentals 3 Credits

Fundamentals of project management to initiate, plan, execute, monitor, control and close projects in different organizational and industry contexts. Alignment with strategic and operational objectives and stakeholder requirements. Hands-on application of tools and methodologies. Interactive and collaborative learning environment emphasizes communication, leadership, teamwork and professionalism.

Special Note: Not available for credit to students who have completed PM A401.

Registration Restrictions: Graduate standing or department approval

May Be Stacked With: PM A401

PM A602 Application of Project Management Processes 3 Credits

Applies project management processes from project inception through closeout. Integration of project management processes through use of hands-on, end-to-end project case studies. Covers project leadership, project requirements definition, stakeholder management, change control, schedule management, risk management, professional responsibility, effective communication and teamwork.

Special Note: Not available for credit to students who have completed PM A402.

Registration Restrictions: Graduate standing or department approval.

May Be Stacked With: PM A402

Prerequisites: PM A401 with a minimum grade of B or concurrent enrollment or PM A601 with a minimum grade of B or concurrent enrollment.

PM A603 Project Initiation and Planning 3 Credits

Explore in depth Project Management (PM) Knowledge Areas, tools and techniques, and the necessary considerations when initiating and planning complex projects. Introduce tools, methods and critical issues associated with the initiation and planning of a project management plan. Students will function in teams and will be challenged with preparing and planning projects with real-world relevance.

Registration Restrictions: PM Department approval and graduate level standing.

Prerequisites: PM A601 and PM A602.

PM A604 Project Executing, Monitoring and Control 3 Credits

Explore in depth Project Management (PM) Knowledge Areas, tools and techniques, and the necessary considerations when in the executing, monitoring and controlling phases of basic and complex projects. Introduce tools, methods and critical issues associated with the execution, monitoring and controlling of a project management plan. Students will function as teams and will be challenged with monitoring and controlling projects with real world relevance.

Registration Restrictions: PM Department approval and graduate level standing.

Prerequisites: PM A601 and PM A602.

PM A605 Operational Integration and Project Closure 3 Credits

Explore in depth Project Management (PM) Knowledge Areas, tools and techniques, and the necessary considerations for operational integration and closure processes of complex projects. Introduce tools, methods and critical issues associated with the operation integration and closure processes of completing a project management plan. Students will function in teams and will be challenged with re-prioritizations and re-assignments projects across various industries with real-world relevance.

Registration Restrictions: PM Department approval and graduate level standing.

Prerequisites: PM A603 and PM A604.

PM A612 Advanced Project Time Management 3 Credits

Introduce, adapt and apply advanced project scheduling and time management processes to effectively achieve on-time project completion. Processes include defining project activity sequencing, estimating activity effort and duration, project schedule development and control. Utilizes project management applications for scheduling, scope definition and activity sequencing.

Special Note: Not available for credit to students who have completed PM A412.

Registration Restrictions: Graduate standing or department approval.

May Be Stacked With: PM A412

Prerequisites: PM A401 with a minimum grade of B or PM A601 with a minimum grade of B.

PM A623 Stakeholder Engagement and Collaboration 3 Credits

Theory, case studies and hands-on application of tools to ensure effective identification, engagement, collaboration and alignment with and among stakeholders from project inception through planning, execution, closure and successful operational integration.

Registration Restrictions: Graduate standing or instructor permission

Prerequisites: PM A601 with a minimum grade of C and PM A602 with a minimum grade of C.

PM A624 Advanced Project Risk Management 3 Credits

Examines methods and processes of planning for, identifying, assessing, prioritizing, monitoring and responding to project threats and opportunities. Qualitative and quantitative risk analysis processes, including risk modeling and simulation, risk ranking, and risk mitigation and response techniques.

Registration Restrictions: Graduate standing and statistics course, or instructor permission.

Prerequisites: PM A601 with a minimum grade of C and PM A602 with a minimum grade of C.

PM A626 Project Procurement Management 3 Credits

Procurement management processes for project planning, solicitation, source selection, contract administration, and contract closeout are presented.

Registration Restrictions: Graduate level standing.

PM A630 Systems Engineering Fundamentals 3 Credits

Explores the systems engineering process from requirements to functional analysis and solution architecture. Analyzes and applies the process, methods and tools for the orchestration of work in multiple project disciplines and the integration of logistics throughout the entire project or product life cycle.

Special Note: Not available for credit to students who have completed PM A430.

Registration Restrictions: Graduate standing or instructor approval

May Be Stacked With: PM A430

PM A632 Advanced Project Controls 3 Credits

Advanced principles of project control and analysis including the development and integration of Work Breakdown Structure, risk analysis, resource performance, task and project metrics, and cost, with schedule and risk management tracing.

Registration Restrictions: Graduate standing or instructor permission

Prerequisites: PM A603 with a minimum grade of C.

PM A650 Information Technology Project Management 3 Credits

Advanced evaluation, selection, application, and assessment of Information Technology Project Management approaches, methodologies, processes, and measurements and control techniques to improve the strategic and operational performance of IT projects in organizations and enterprises.

Registration Restrictions: Graduate academic standing and PM departmental approval

Prerequisites: PM A601.

PM A651 Advanced Construction Project Management 3 Credits

Advanced application of project management principles and processes used in the strategic selection, planning and management of construction and development projects from concept through operation. Identification, selection and application of field engineering systems and procedures to effectively meet construction project objectives.

Registration Restrictions: Graduate level standing and PM Department approval.

Prerequisites: PM A601.

PM A652 Project Definition and Research Methods 3 Credits

Explores the techniques used to identify customer requirements for proper definition of a project and describe tools and methods to conduct research projects in project management knowledge areas.

Registration Restrictions: Graduate standing and statistics course or instructor permission

PM A653 Project Management Application Tools 3 Credits

Explore widely-used tools in project management knowledge areas and apply them to practical problems. Includes software and non-software tools essential for dealing with unique and challenging problems in project management situations.

Registration Restrictions: Graduate standing or instructor permission

Prerequisites: PM A601 with a minimum grade of C.

PM A686A Capstone Project: Initiating and Planning 3 Credits

Initiating, planning and researching a sponsored, student-selected and faculty-approved capstone project undertaken to research and/or contribute new concepts, tools and capabilities to address relevant project management challenges. Demonstrates mastery of project management principles, processes, tools/techniques and cumulative knowledge gained from prior coursework as specifically applied to project initiating and planning processes.

Registration Restrictions: Graduate level standing and department approval

Prerequisites: PM A603 with a minimum grade of B.

PM A686B Capstone Project: Executing, Controlling and Closing 3 Credits

Executing, controlling and closing component of a sponsored, student-selected and faculty-approved capstone project undertaken to research and/or contribute new concepts, tools and capabilities to address relevant project management challenges.

Registration Restrictions: Graduate level standing and department approval

Prerequisites: PM A604 with a minimum grade of B and PM A686A with a minimum grade of B.

PM A690 Selected Topics in Project Management 3 Credits

Exploration of advanced issues, unique areas and specialized topics related to project management.

Registration Restrictions: Admission to the MSPM program or ESPM Department approval.

Special Note: May be repeated with a change in subtitle.

Prerequisites: PM A601.

PM A694S Lean Six Sigma Green Belt 3 Credits

Fundamentals of Lean Six Sigma (LSS) necessary to prepare individuals to implement principles and practices of LSS using fact-based and data-driven methodologies to improve the customer experience, reduce waste and add unique value. Develop leadership and teaming skills necessary to facilitate efforts by teams and work groups to produce tangible results in support of strategic and operational objectives of organizations. Hands-on application of LSS and project management processes, tools and techniques to case studies and real projects will prime individuals to lead and facilitate process improvement projects to produce tangible results in support of strategic and operational objectives of organizations. Interactive and collaborative learning environment emphasizes communication, leadership, cross-functional teamwork and professionalism.

May Be Stacked With: A494S

PM A695 Project Management Internship 1-6 Credits

Provides students with opportunities to practice project management skills in a professional environment. Professional work experience designed to provide students with the opportunity to investigate practical applications of project management tools and techniques within an organization. Assignments and projects arranged with cooperating organizations and agencies.

Registration Restrictions: Graduate level standing and ESPM Department approval

Prerequisites: PM A603 or PM A604.

PM A698 Individual Research 3-6 Credits

A project to be designed between the student and faculty members to allow the opportunity to pursue special advanced interests in project management. Students complete an applied research project that involves the conceptualization, design, implementation and dissemination of results and outcomes that demonstrate mastery of project management concepts and contribute to the project management body of knowledge and professional practice.

Registration Restrictions: Graduate standing and instructor approval

Prerequisites: PM A601 and PM A602.

Psychology (PSY)

Courses

PSY A111 Introduction to Psychology 3 Credits

Introduces the fundamentals of human behavior and mental processes and how they are impacted by social, cultural and biological factors. Covers topics such as social science research methods, personality, sensation, perception, psychological disorders, lifespan development, memory, learning, thinking, language and intelligence.

Attributes: UAA Social Sciences GER.

PSY A115 Memory: How It Works and How to Improve It 3 Credits

An overview of current theories and research about human memory with an emphasis on practical techniques for memory improvement.

PSY A130 Crisis Line/Shelter Advocacy 1 Credit

Basic listening skills and crisis intervention techniques. Overview of domestic violence, adult and child sexual assault, legal alternatives, and community resources. Kodiak College

PSY A135 Domestic Violence and Sexual Assault Advocacy Training 1 Credit

In-depth review of fundamentals of domestic violence and sexual assault advocacy with specific emphasis on law enforcement, legal, medical, and social services. Focuses on regulation and program standards, dynamics of advocacy case work, development of techniques of effective interaction with clients, and working knowledge of community resources. Kodiak College

PSY A143 Death and Dying 3 Credits

An examination of the event of death and the process of dying in contemporary society. Psychological aspects of loss, grieving, and acceptance of one's own mortality are presented along with an exploration of helping services available in the local community. Social issues involving death are discussed.

PSY A150 Lifespan Development 3 Credits

Reviews physical, cognitive, and socioemotional aspects of human growth, maturation, and development across the lifespan. Special attention is given to the effects of broader sociocultural influences on development. Classical and contemporary theories relating to development across the lifespan are considered.

Attributes: UAA Social Sciences GER.

PSY A153 Human Relations 3 Credits

A survey of human relations to include communication, problem solving, interaction, relationship, choice and change skills.

PSY A168 Human Sexuality 3 Credits

Introduces topics of human sexual functioning including physiology, psychology, sociology, philosophy, and morality of human sexual practices and love.

PSY A190 Introductory Topics in Psychology 1 Credit

Introduction to a special topic in psychology of general interest to the community. Presented by researchers and/or behavioral health experts. Specific titles as announced.

Special Note: May be repeated for a maximum of 6 credits with a change of subtitles. Some topics might have an additional course fee.

PSY A200 Introduction to Behavior Analysis 3 Credits

An introduction to the principles of behavior analysis used to understand and change behavior. Students will learn how behavioral scientists observe, measure and change behavior to help people live healthy, productive lives.

Attributes: UAA Social Sciences GER.

PSY A260 Statistics for Psychology 3 Credits

Presents basic descriptive and inferential statistical techniques used in psychology. Covers scales of measurement, central tendency, variability, normal distributions, standard scores, correlation, regression, hypothesis testing, parametric and nonparametric tests for independent and dependent groups, and one- and two-way analysis of variance.

Special Note: Concurrent enrollment in PSY A260L is strongly recommended. Students must earn a grade of C or higher in PSY A260 before being admitted to PSY A261, PSY A355 and/or psychology capstone courses.

Prerequisites: (MATH A105 with a minimum grade of C or MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C or MATH A251 with a minimum grade of C) and PSY A111 with a minimum grade of C.

PSY A260L Statistics for Psychology Lab 1 Credit

Laboratory that builds on the material covered in PSY A260, giving hands-on experience with data-analysis software. Includes the use of software for graphing, descriptive statistics, correlation, simple regression, t-tests, analysis of variance, and chi-square.

Special Note: Either prior completion of PSY A260 or concurrent enrollment in PSY A260 is required. Students must earn a grade of C or higher in PSY A260L before being admitted to PSY A261, PSY A355 and/or psychology capstone courses.

Registration Restrictions: Either prior completion or concurrent enrollment in PSY A260.

Prerequisites: (MATH A105 with a minimum grade of C or MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C or MATH A251 with a minimum grade of C) and PSY A111 with a minimum grade of C.

PSY A261 Research Methods in Psychology 3 Credits

Introduces students to the scientific approach to studying behavior and mental processes. Covers experimental and non-experimental methods, ethical principles and practices, data collection and analysis and APA style writing.

Prerequisites: WRTG A111 with a minimum grade of C and PSY A111 with a minimum grade of C and PSY A260 with a minimum grade of C and PSY A260L with a minimum grade of C.

Corequisites: PSY A261L.

PSY A261L Research Methods in Psychology Laboratory 1 Credit

Provides experience in designing research projects and data collection as well as analysis, interpretation and reporting of results simulating the research activities of psychologists.

Prerequisites: WRTG A111 with a minimum grade of C and PSY A111 with a minimum grade of C and PSY A260 with a minimum grade of C and PSY A260L with a minimum grade of C and PSY A261 with a minimum grade of C or concurrent enrollment.

Corequisites: PSY A261.

PSY A313 Psychology of Women 3 Credits

Examines women's physical, social, and emotional development across the lifespan from cultural, social, and biological perspectives. The course covers important facets of women's lives, including love and relationships, sexuality, pregnancy and motherhood, physical and mental health, education and work, and discrimination and violence against women.

Registration Restrictions: Junior or senior level standing or 6 credits of psychology.

Prerequisites: PSY A111 with a minimum grade of C.

PSY A316 Motivation and Emotion 3 Credits

Examines the basic theories and phenomena associated with motivational states and emotional experiences. Human motives are described and related to various forms of behavior. Characteristics of emotional states are identified.

Prerequisites: PSY A111.

PSY A329 Positive Psychology 3 Credits

Survey of the subfield of psychology which focuses on optimizing human potential and psychological functioning -- with an emphasis on research findings. Topics covered include the character strengths and virtues of wisdom and knowledge, courage, humanity, justice, temperance, and transcendence.

Prerequisites: WRTG A111 with a minimum grade of C and (PSY A111 or PSY A150).

PSY A345 Abnormal Psychology 3 Credits

Introduces the psychology of abnormal behavior through research and clinical applications using a biopsychosocial model. Psychological disorders are presented within their multicultural, gender, and developmental contexts. Topics also include history, assessment, suicide, psychopharmacology, mental institutions, psychotherapy, and prevention as well as contemporary legal issues.

Prerequisites: PSY A111.

PSY A355 Learning and Cognition 4 Credits

Overview of major learning principles, including classical and operant conditioning. Also includes a contemporary review of the memory system, the representation of knowledge, skill acquisition, memory retrieval, forgetting, and aspects of language processing.

Special Note: The required laboratory includes work in both learning and cognition, and requires that students be familiar with research design, statistical calculations, and APA style.

Prerequisites: (PSY A111 with a minimum grade of C and PSY A150 with a minimum grade of C and PSY A260 with a minimum grade of C and PSY A260L with a minimum grade of C and PSY A261 with a minimum grade of C and WRTG A111 with a minimum grade of C) and (WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C).

PSY A356 Psychology of Learning 3 Credits

Overviews major learning principles. Topics include habituation, sensitization, Pavlovian conditioning, operant conditioning and social learning.

Registration Restrictions: Admission to BA or BS in Psychology

Prerequisites: PSY A260 with a minimum grade of C and PSY A260L with a minimum grade of C and PSY A261 with a minimum grade of C.

Corequisites: PSY A356L.

PSY A356L Psychology of Learning Laboratory 1 Credit

Provides experience designing and conducting experiments demonstrating major learning principles.

Registration Restrictions: Admission to BA or BS in Psychology

Prerequisites: PSY A260 with a minimum grade of C and PSY A260L with a minimum grade of C and PSY A261 with a minimum grade of C.

Corequisites: PSY A356.

PSY A365 Child and Adolescent Development 3 Credits

Focuses on physical, cognitive, emotional and social development in childhood and adolescence. Surveys theoretical views of child and adolescent development and the effects of genes, maturation, environment and socialization with an emphasis on research findings.

Prerequisites: WRTG A111 with a minimum grade of C and (PSY A111 or PSY A150).

PSY A366 Perception 3 Credits

Presents current theories and phenomena which effect how we perceive the world around us. Explores the capacities and limitations of the sensory apparatus, particularly vision. Considers implications of the human tendency to "misperceive" situations.

Prerequisites: PSY A111 and PSY A261.

PSY A367 Cognitive Psychology 3 Credits

Introduces the scientific study of cognition. Topics include object recognition, attention, memory, language, concepts, judgment and decision making, reasoning, and problem solving.

Prerequisites: WRTG A111 with a minimum grade of C and PSY A111 with a minimum grade of C.

PSY A368 Personality 3 Credits

Survey of modern and contemporary theories of personality and personality development. Focuses on how and why people differ in the ways they think, feel, and behave. Emphasizes research findings on the measurement of personality and biological and social bases of personality.

Prerequisites: WRTG A111 with a minimum grade of C and (PSY A111 or PSY A150).

PSY A370 Behavioral Neuroscience 3 Credits

Examines how behavior and cognition are mediated by biological processes. Covers neural activity, the organization of the nervous system, psychopharmacology, and biological bases of normal and abnormal behaviors.

Special Note: Although this course is one option for a university- wide integrative capstone, it does not meet the psychology major capstone requirement.

Registration Restrictions: Junior or senior standing.

Prerequisites: WRTG A111 with a minimum grade of C and (PSY A111 with a minimum grade of C or PSY A150 with a minimum grade of C) and (BIOL A102 with a minimum grade of C or BIOL A108 with a minimum grade of C or BIOL A111 with a minimum grade of C) and (WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C).

Attributes: UAA Integrative Capstone GER.

PSY A372 Community Psychology 3 Credits

Focus on the impact of social and environmental factors on behaviors. Emphasis on interaction theories and research and the application to communications, dynamics of power, confrontation and conflict, and creative problem solving.

Registration Restrictions: One other 3-credit psychology course.

Prerequisites: PSY A111.

PSY A375 Social Psychology 3 Credits

Focuses on individuals in social situations and the scientific study of how individuals think about, influence, and relate to one another. Includes theory and research on subjective beliefs about the self and the social world; attitudes and behaviors; genes and culture; conformity; persuasion; group dynamics; prejudice; aggression; attraction; and altruism.

Prerequisites: WRTG A111 with a minimum grade of C and (MATH A105 or MATH A121 or MATH A151 or MATH A152 or MATH A251) and (PSY A111 or PSY A150).

PSY A380 Psychology of Stress and Coping 3 Credits

Examines the use of self-regulation techniques in the management of stress. Topics include cognitive behavior strategies, goal setting, time management, assertiveness training, relaxation techniques, biofeedback, diet, exercise, and alternative health practices.

Registration Restrictions: One other 3-credit psychology course.

Prerequisites: PSY A111.

PSY A398 Individual Research 3 Credits

Under the supervision of a faculty member either (a) initial participation on a team where the student helps carry out a research project by a faculty member in psychology, or (b) initial attempt by the student to design and carry out an empirical research project in psychology.

Special Note: May be repeated for a maximum of 9 credits.

Registration Restrictions: Faculty permission.

Prerequisites: PSY A260 and PSY A260L and PSY A261.

PSY A400 Strategies of Behavior Change 3 Credits

An exploration of the principles, strategies and clinical applications of behavior analysis. Topics will include methods to improve desirable behavior and decrease problem behavior, methods to evaluate behavior change and program effectiveness, and development of comprehensive behavioral programs.

Special Note: Not available for credit to students who have completed PSY A600.

May Be Stacked With: PSY A600

Prerequisites: PSY A200 with a minimum grade of C or PSY A355 with a minimum grade of C.

PSY A412 History of Psychology 3 Credits

Explores the history of psychology. Illuminates major historical paradigms -- past and present -- since the early 19th century through the 20th century. Addresses major themes in psychology today.

Special Note: Course meets the departmental capstone requirement for the psychology major.

Prerequisites: PSY A111 with a minimum grade of C and PSY A150 with a minimum grade of C and PSY A260 with a minimum grade of C and PSY A260L with a minimum grade of C and PSY A261 with a minimum grade of C and (WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C).

PSY A420 Conducting Research in Psychology 3 Credits

A survey of research design, from designing a study, statistically analyzing the data, to interpreting and reporting the results. Useful to those anticipating a project (such as thesis) and also valuable to those who wish to better understand research reports.

Special Note: Fulfills capstone requirement for psychology majors.

Prerequisites: PSY A111 and PSY A261 and (PSY A260 or STAT A200 or STAT A253 or STAT A307).

PSY A425 Clinical Psychology 3 Credits

Historical developments and contemporary applications of clinical psychology. Survey of major counseling and psychotherapy approaches, including basic assumptions, techniques, and related research findings.

Prerequisites: PSY A111 and PSY A345.

PSY A428 Evolutionary Psychology 3 Credits

Senior-level survey of theory and research pertaining to an evolutionary model of human nature, and how such a model can integrate many of psychology's different branches. Compares traits between and within different species, addressing how natural and sexual selection might have partially shaped human nature and patterns of human cognition, emotion, behavior, and social interactions.

Special Note: Meets the departmental capstone requirement for the psychology major.

Registration Restrictions: Two of the following courses: PSY A313, PSY A316, PSY A345, PSY A355, PSY A366, PSY A370, PSY A375

Prerequisites: (WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C) and PSY A111 with a minimum grade of C and PSY A150 with a minimum grade of C and PSY A260 with a minimum grade of C and PSY A260L with a minimum grade of C and PSY A261 with a minimum grade of C.

PSY A442 Psychopathology of Childhood and Adolescence 3 Credits

Focuses on the psychological disorders of childhood and adolescence, including the classification of disorders and their diagnosis, etiology, and intervention/treatment. The importance of evidence-based treatment is emphasized.

Prerequisites: PSY A150 with a minimum grade of C and PSY A345 with a minimum grade of C and WRTG A111 with a minimum grade of C.

PSY A447 Behavioral Treatment of Autism Spectrum Disorder 3 Credits

An exploration of autism spectrum disorder, including etiology, impact of the disorder on behavior, treatment options, and the role of family and community supports. Course emphasizes community-based behavioral treatment and early intensive behavioral intervention.

Special Note: Not available for credit to students who have completed PSY A647.

May Be Stacked With: PSY A647

Prerequisites: PSY A400 with a minimum grade of B.

PSY A450 Adult Development and Aging 3 Credits

Reviews psychological, biological, and social development along with economic and historical circumstances of aging in the span of life between early and late adulthood. A special focus is placed on aging within today's world and the use of applied developmental psychology in promoting positive aging.

Prerequisites: PSY A111 or PSY A150.

PSY A455 Interventions for Challenging Behavior 3 Credits

An exploration of strategies used to treat challenging and dangerous behavior such as delinquency, eating disorders, aggression, self-injury and substance abuse. Course presents an overview of neurodevelopmental, neurocognitive and other disorders that commonly produce challenging behavior. Course emphasizes the role of family and community supports in community-based behavioral treatment.

Special Note: Not available for credit to students who have completed PSY A655.

May Be Stacked With: PSY A655

Prerequisites: PSY A400 with a minimum grade of B.

PSY A465 Cross-Cultural Psychology 3 Credits

Explores ethnic-cultural values, attitudes and beliefs as they relate to interpersonal relationships and human behavior. Examines how behavioral styles, manifestations of psychopathology and effective psychotherapy methods are affected by ethnic-cultural factors.

Registration Restrictions: Three other psychology courses; PSY A425 recommended.

May Be Stacked With: PSY A654

Prerequisites: PSY A111.

PSY A467 Organizational Behavior Management 3 Credits

An exploration of behavior analytic strategies used to manage and improve employee performance in the workplace. Topics will include effective staff training and support strategies, performance management, organizational system analysis, and behavior-based safety, implementation science and effective consultation strategies.

Special Note: Not available for credits to students who have completed PSY A667.

May Be Stacked With: PSY A667

Prerequisites: PSY A400 with a minimum grade of B.

PSY A473 Psychological Testing 3 Credits

Provides an understanding of psychological measurement and test development. Topics include the history of testing, ethical testing practices, standardization, sources of bias, reliability, and validity. Common psychological tests are introduced.

Prerequisites: PSY A111 with a minimum grade of C and (PSY A260 with a minimum grade of C or STAT A200 with a minimum grade of C).

PSY A478 Applications of Behavior Analysis 3 Credits

An exploration of topics in behavior analysis, emphasizing the role of the behavior analyst as a scientist-practitioner. Topics will include the philosophical history of behaviorism, modern behavioral research and application of behavior analysis to socially relevant problems.

Special Note: Not available for credit to students who have completed PSY A678.

May Be Stacked With: PSY A678

Prerequisites: PSY A400 with a minimum grade of B.

PSY A485 Health Psychology 3 Credits

Course examines psychological, physical, and environmental factors that influence mental and physical health. Topics include: epidemiology, stress theories, brain anatomy, psychophysiology, psychoneuroimmunology, chronic pain, tobacco/alcohol abuse, diet, exercise, terminal illness, and how doctor/patient communication affects basic health care delivery. The biopsychosocial orientation is presented from both disease and prevention strategies.

Prerequisites: PSY A111 and PSY A370.

PSY A486 Forensic Psychology 3 Credits

Introduces the development and application of psychology's scientific contribution to civil and criminal legal issues. Topics include history and philosophy of forensic psychology, report preparation (methods, assessment, and writing), practice and research ethics, expert testimony, mediation, domestic violence, child abuse, discrimination, sexual harassment, and criminal profiling.

Prerequisites: PSY A111 or SOC A101.

PSY A490 Advanced Topics in Psychology 1-3 Credits

Advanced coverage of a special topic in psychology of interest to those with previous coursework in psychology. Presented by researchers and/or behavioral health experts. Specific titles as announced. Some topics might have an additional course fee.

Special Note: May be repeated for a maximum of 6 credits with different topics (subtitles).

Registration Restrictions: 12 credits of psychology.

May Be Stacked With: PSY A690

PSY A492 Senior Seminar: Contemporary Topics in Psychology 3 Credits

In depth, discussion-oriented seminar for senior students who are pursuing a major or minor in psychology. Uses original-source materials and journal articles about a contemporary issue in psychology. Specific titles to be announced. Some topics might have an additional course fee.

Special Note: May be repeated with a change in subtitle for a maximum of 6 credits.

Registration Restrictions: 12 credits of psychology

May Be Stacked With: PSY A690

PSY A495A Psychology Practicum 3 Credits

Arranged placement in a supervised setting that provides psychological, behavioral or social services. Focus on development of professional skills, communication skills, implementation and evaluation of client assessments and interventions, and basic ethics for helping professionals. Students are expected to complete 90 hours of supervised experience.

Special Note: Meets the departmental capstone requirement for the psychology major.

Registration Restrictions: Instructor permission

Prerequisites: (PSY A150 with a minimum grade of B and PSY A261 with a minimum grade of B) or (PSY A447 with a minimum grade of B or PSY A455 with a minimum grade of B or PSY A467 with a minimum grade of B or PSY A478 with a minimum grade of B).

PSY A495B Applied Behavior Analysis Practicum II 1-3 Credits

Arranged placement in supervised settings that provide applied behavior analytic (ABA) services. Focuses on professional skill development, accruing sufficient experience hours in preparation for certification as a Board-Certified Assistant Behavior Analyst (BCaBA), and BCaBA exam preparation.

Special Note: May be repeated for a maximum of 10 credits.

Registration Restrictions: Instructor permission

Prerequisites: PSY A495A with a minimum grade of B.

PSY A498 Individual Research 3 Credits

Under the supervision of a faculty member either a) advanced participation on a team where the student helps carry out a research project by a faculty member in Psychology, or b) advanced attempt by the student to design and carry out an empirical research project in psychology.

Special Note: May be repeated for a maximum of 9 credits.

Registration Restrictions: Faculty permission.

Prerequisites: PSY A398 or PSY A420.

PSY A499 Senior Thesis 3 Credits

Independent research under faculty supervision. Culminates in a document prepared to APA publication standards. Presentation at a research conference is encouraged.

Special Note: May be repeated for a maximum of 6 credits.

Registration Restrictions: Instructor approval.

Prerequisites: (WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C) and PSY A111 with a minimum grade of C and PSY A150 with a minimum grade of C and PSY A260 with a minimum grade of C and PSY A260L with a minimum grade of C and PSY A261 with a minimum grade of C and PSY A420.

PSY A499A Developing Psychological Research 3 Credits

Develops skills for scientific discovery, including evaluation of literature to identify gaps in our understanding of psychological phenomenon and writing research proposals, grant applications, and research ethics (e.g., IRB/IACUC) protocols.

Special Note: Fulfills capstone requirement for psychology majors.

Prerequisites: PSY A111 with a minimum grade of C and PSY A261 with a minimum grade of C and PSY A261L with a minimum grade of C and (PSY A260 with a minimum grade of C or STAT A200 with a minimum grade of C or STAT A253 with a minimum grade of C or STAT A307 with a minimum grade of C).

PSY A600 Strategies of Behavior Change 3 Credits

An advanced exploration of the principles, strategies and clinical applications of behavior analysis. Topics will include in-depth analysis of the methods used to improve desirable behavior and decrease problem behavior, methods to evaluate behavior change and program effectiveness, and development of comprehensive behavioral programs.

Special Note: Not available for credit to students who have completed PSY A400.

Registration Restrictions: Graduate standing

May Be Stacked With: PSY A400

PSY A601 Clinical/Community/Cross-Cultural Integration Seminar 1 Credit

Introduces current trends in community, clinical, and cross-cultural psychology. Students are encouraged to explore how these three fields complement each other to bring about positive change in community and clinical settings. Special emphasis is on ways to conceptualize mental health and community issues in culturally appropriate ways.

Special Note: May be repeated for a maximum of 5 credits.

Registration Restrictions: Admission to the Ph.D. in Clinical-Community Psychology.

PSY A602 Native Ways of Knowing 3 Credits

Appropriate and valid ways of describing and explaining human behavior by using the social context, culture, and history of indigenous groups. Includes indigenous approaches to values, health, the interconnection of family and community, the nature of spirituality and indigenous healing, and the importance of elders and spiritual healers.

Registration Restrictions: Graduate standing in Psychology.

PSY A603 Alaskan and Rural Psychology 3 Credits

Introduces rural community psychology, including the diversity of rural communities with emphasis on Alaska, and the rural circumpolar north. Provides an introduction to rural health promotion, prevention, and behavioral health care and a basis for understanding many of the issues of services planning and delivery in rural areas.

Registration Restrictions: Graduate standing in Psychology.

Prerequisites: PSY A632.

PSY A604 Biological and Pharmacological Bases of Behavior 3 Credits

Covers biological underpinnings of behavior and the basic principles of pharmacology. Deals with physiological causes and contributors to psychopathology and with the medical sequelae of psychiatric disorders. Topics will include issues such as differential diagnosis, referral for medical or psychiatric evaluation, the functional and structural characteristics of relevant physiological systems.

Registration Restrictions: Graduate standing in Psychology.

Prerequisites: PSY A622.

PSY A605 History and Systems 1 Credit

Provides a brief philosophically-oriented overview of the history of psychology. Compares Western psychology in the 19th and 20th centuries and selected indigenous psychologies of Asia and North America. Special attention is given to systems of thought that have emerged since the founding of psychology as an empirical science.

Registration Restrictions: Graduate standing in Psychology.

PSY A606 Native Ways of Healing 3 Credits

Explores healing from a variety of Native perspectives, particularly from Alaska Native perspectives. Emphasizes the preparation and education of healers, their roles and work, and integration within the community. Students will have the opportunity to examine the possible integration of clinical and community psychology with indigenous approaches to healing.

Registration Restrictions: Graduate standing in Psychology.

PSY A607 Cognition, Affect and Culture 3 Credits

Presents an overview of attention, memory, appraisal, and emotion with applications to clinical psychology in a cultural context. Cultural influences on emotional experience and cognition are explored. The etiology and treatment of psychological disorders with significant cognitive and affective disturbance are explored.

Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology and any psychology undergraduate course in learning, cognition, or emotion.

PSY A609 Applied Research Methods 3 Credits

Introduces students to a variety of research designs in clinical and applied psychology, including experimental and quasi-experimental designs, single-subject designs, and program evaluation. Reviews issues of statistical, construct, internal, and external validity. Focus is placed on understanding the application of research methods and issues of validity, with emphasis placed on developing the skills needed to evaluate and apply the findings from published research in clinical practice. Examples drawn from the applied psychology literature and meta-analyses are used to develop skills and knowledge in the critical evaluation and application of the extant research literature.

Registration Restrictions: Graduate standing in Psychology.

Prerequisites: PSY A260 and PSY A261.

PSY A611 Ethics and Professional Practice 3 Credits

Comprehensive overview of the ethical principles and legal statutes involved in the practice of counseling and psychotherapy. Designed to serve as a forum for the discussion of ethical issues and other concerns relevant to professionals in the fields of counseling and psychotherapy. Topics covered will play an important role in the preparation and development of ethical and competent professionals.

Registration Restrictions: Graduate standing in Psychology.

PSY A612 Human Development in a Cultural Context 3 Credits

Study of developmental theory, research and substantive applied issues across the lifespan. Particular emphasis is placed on understanding how culture and sociocultural context impact the interplay of biology and environment in the development of essential qualities and characteristics of individuals.

Registration Restrictions: Graduate standing in psychology

PSY A616 Program Evaluation and Community Consultation I 3 Credits

The first in a two-course series, providing an overview of theories, methods, and applications of program evaluation and community consultation as tools for facilitating systemic and programmatic changes in community and clinical settings. Seminar covers techniques of entry into various settings and designing program evaluations in collaboration with various community organizations.

Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology.

Prerequisites: PSY A639.

PSY A617 Program Evaluation and Community Consultation II 3 Credits

The second in a two-course series, introducing the principles and dynamics involved in various types of consultative relationships in community and clinical settings, with a focus on cross-cultural and ethical issues. Covers methods of program evaluation implementation and use of program evaluation findings for consulting with relevant stakeholders.

Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology.

Prerequisites: PSY A616.

PSY A622 Multicultural Psychopathology 3 Credits

An overview of contemporary views on child and adult psychopathology from a multicultural perspective. Reviews the fundamentals of clinical interviewing and diagnosis. Includes training in the DSM-IV diagnostic system. The role of culture, ethnicity, gender and social class in symptom formation and the experience of psychological disorders will be examined.

Registration Restrictions: Graduate standing in Psychology.

PSY A623 Intervention I 3 Credits

Increases knowledge and skills related to traditional and nontraditional therapeutic interventions. Students are provided with a range of theoretical perspectives, a conceptual understanding of, and an opportunity to practice a wide range of culturally relevant and appropriate techniques that are applicable in traditional and nontraditional community mental health settings.

Registration Restrictions: Graduate standing in Psychology.

PSY A624 Group Therapy 3 Credits

Theories of group dynamics and exploration of group processes for a variety of populations. Includes interpretation and analysis of interactional and interpersonal patterns. Features an experiential component of group participation and leadership.

Special Note: Offered spring semesters.

Registration Restrictions: Graduate standing in Psychology

Prerequisites: PSY A623 or concurrent enrollment.

PSY A625 Introduction to Sex Therapy 3 Credits

Introduces students to the practice of sex therapy. Includes ethics specific to the work of sex therapy, common presenting problems and associated treatments, assessment and diagnoses, as well as a decision-making model to clarify when a sexual problem is within a clinician's scope of practice.

Registration Restrictions: Graduate standing

Prerequisites: PSY A626 with a minimum grade of B or SWK A656 with a minimum grade of B.

PSY A626 Family Therapy 3 Credits

Covers systems theory of family dynamics and behavioral change concepts. Includes history and development, as well as a critical survey of prevailing interventions. Cultural relevance in family therapy is emphasized.

Registration Restrictions: Graduate standing in Psychology.

Prerequisites: PSY A623 or concurrent enrollment.

PSY A627 Community-Based Intervention Skills 3 Credits

A theoretical review and practical applications of community-based interventions, including brief therapy, crisis intervention, and case management. Contemporary issues affecting the delivery of mental health services in community-based settings are reviewed, with a focus on imparting skills for the community mental health practitioner.

Prerequisites: PSY A623.

PSY A629 Intervention II 3 Credits

Deepens understanding of the variety and application of intervention techniques in diverse settings. Directs students to explore the efficacy of specific interventions in a range of settings and with a variety of populations. Shapes critical thinking and basic intervention evaluation skills.

Registration Restrictions: Graduate standing in Psychology.

Prerequisites: PSY A623.

PSY A631 Cognitive Behavior Therapy 3 Credits

Behavioral strategies of major clinical relevance (e.g., treatment of anxiety, depression). Procedures (including behavioral assessment) are examined in detail and related to evidence for efficacy, with emphasis on adult populations.

Registration Restrictions: Graduate standing in Psychology.

Prerequisites: PSY A623 or concurrent enrollment.

PSY A632 Community Psychology Across Cultures 3 Credits

An overview of theory, research, and practice of community psychology with particular emphasis on cross-cultural themes, the design and evaluation of interventions in remote and rural community settings, prevention and health promotion, and social change. Particular emphasis will be on issues relevant to Alaska Native communities.

Registration Restrictions: Graduate standing in Psychology.

PSY A633 Tests and Measurement in Multicultural Context 3 Credits

Surveys principles of construction, analysis and evaluation of psychological tests in a multicultural context. Emphasizes culturally sensitive application of psychological tests and measurements.

Focuses on the history, theory and methods of psychological testing by examining the areas of intelligence, personality, and vocation.

Discusses widely-used intelligence and personality tests and procedures.

Registration Restrictions: Graduate standing in Psychology.

PSY A638 Child Clinical Psychology 3 Credits

Reviews childhood behavior and developmental disorders and provides an introduction to ethical issues, assessment approaches and intervention strategies to address these disorders. Emphasis is placed on incorporating contextual factors (development, family, culture) and empirically-validated interventions into the treatment of children.

Registration Restrictions: Graduate standing in Psychology or baccalaureate degree and professional experience.

Prerequisites: PSY A622 or concurrent enrollment and PSY A623 or concurrent enrollment.

PSY A639 Research Methods 3 Credits

Presents methods used for research in community, clinical, and cross-cultural settings. Introduces epistemologies and ethics relevant to research with rural and indigenous people. Includes a variety of designs and data gathering methods for improving understanding of behavior in social settings. Quantitative, qualitative, and mixed-method approaches will be presented.

Registration Restrictions: Graduate standing in Psychology.

Prerequisites: PSY A260.

PSY A640 Substance Abuse: Etiology, Treatment and Assessment 3 Credits

Overview of substance abuse, including substances of abuse; prevalence; etiology and consequences (biological, psychological and social); assessment of substance abuse; treatment planning; treatment; and prevention. Gives attention to diversity, including issues important for indigenous and rural populations.

Registration Restrictions: Admission to the Ph.D. program in Clinical-Community Psychology

PSY A647 Behavioral Treatment of Autism Spectrum Disorder 3 Credits

An advanced survey of autism spectrum disorder, including in-depth study of etiology, impact of the disorder on behavior, treatment options, and the role of family and community supports. Course emphasizes community-based behavioral treatment and early intensive behavioral intervention.

Special Note: Not available for credit to students who have completed PSY A447.

Registration Restrictions: Graduate standing

May Be Stacked With: PSY A447

Prerequisites: PSY A600.

PSY A648 Motivational Interviewing 3 Credits

Motivational Interviewing (MI) is an empirically-supported, person-centered, goal-oriented approach for facilitating change by exploring & resolving ambivalence. With background lectures on the theoretical and empirical bases of MI, class sessions emphasize demonstration and practice of MI skills and strategies for diverse behavioral applications (e.g., addictions, health promotion, chronic disease management).

Registration Restrictions: Graduate standing. HS A648 and SWK A648

PSY A650 Systems of Human Behavior I 3 Credits

Selected overview of contributions from behavioral sciences useful to physicians in primary care clinical practice. Emphasizes impact of such factors as cultural background, social role, sexual identity and belief system upon students' future effectiveness as physicians. Presents role of behavioral factors in major management problems faced in medical practice. Teaches useful skills for analyzing behavior, defining behavioral objectives, and designing treatment strategies to obtain these objectives.

Registration Restrictions: Graduate level, and approval of WWAMI Biomedical Program Director and faculty.

Crosslisted With: BIOM A650

PSY A652 Practicum Placement - Clinical I 1-3 Credits

A supervised clinical practicum experience in psychological interviewing, diagnosis, and psychotherapy. Applied techniques focusing on delivery of clinical services in traditional or non-traditional clinical settings. Cultural factors are considered in each of these areas.

Special Note: May be repeated for maximum of 9 credits.

Registration Restrictions: Admission to Ph.D. Program in Clinical-Community Psychology.

Prerequisites: PSY A611 and PSY A622 and PSY A623 and PSY A629.

PSY A653 Practicum Placement - Clinical II 1-3 Credits

An advanced clinical practicum experience designed to provide increased depth in applying theory to clinical practice and improving skills as a clinician. Covers application of psychological assessment principles. Impact of cultural factors continues as a major aspect of the practicum experience.

Special Note: May be repeated for maximum of 9 credits.

Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology.

May Be Stacked With: PSY A670

Prerequisites: PSY A652 with a minimum grade of B.

PSY A654 Cultural Issues in Psychotherapy 3 Credits

Places focus on understanding the role that ethnic and cultural issues can play in psychotherapy relationships. Opportunities are provided to gain the awareness, knowledge and skills necessary to become more effective in cross-cultural psychotherapy situations.

Special Note: PSY A654 cannot be applied toward the MS degree in Clinical Psychology if PSY A465 was previously taken for credit. Offered spring semesters.

Registration Restrictions: Graduate standing in Psychology

May Be Stacked With: PSY A465

Prerequisites: PSY A623.

PSY A655 Interventions for Challenging Behavior 3 Credits

An advanced exploration of strategies used to treat challenging and dangerous behavior such as delinquency, eating disorders, aggression, self-injury and substance abuse. Course presents a survey of neurodevelopmental, neurocognitive and other disorders that commonly produce challenging behavior. Course emphasizes the role of family and community supports in community-based behavioral treatment.

Special Note: Not available for credit to students who have completed PSY A455.

Registration Restrictions: Graduate standing

May Be Stacked With: PSY A455

Prerequisites: PSY A600.

PSY A657 Quantitative Analysis 3 Credits

Examines the underlying principles of statistics, including the logic of statistical inference, probability, power, effect size, and Type 1 and 2 errors. Uses statistics for designs including the description of groups, correlation, predictive models, inferential statistics, analysis of mixed-method designs, and common nonparametric techniques.

Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology.

Prerequisites: PSY A639.

PSY A658 Qualitative Analysis 3 Credits

Provides an in-depth study of the theory of qualitative inquiry, qualitative methodologies, and techniques of qualitative research. Special emphasis on using qualitative research methods in cross-cultural settings and in the broader context of community-based participatory research (CBPR). Uses of qualitative research methods in community and clinical psychology.

Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology.

Prerequisites: PSY A639.

PSY A659 Multivariate Methods in Psychology 3 Credits

Provides a conceptual discussion of and statistical software training in advanced statistical analysis, including multivariate regression, canonical correlation, discriminant analysis, multivariate analysis of variance, principal component analysis, factor analysis, logistic regression, and cluster analysis.

Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology.

Prerequisites: PSY A639 and PSY A657.

PSY A665 Psychotherapy Practicum 1-3 Credits

Applied techniques course focusing on psychotherapy issues and problems encountered in the general psychotherapy setting. Students gain supervised experience in the process of psychotherapy with particular focus placed on cultural diversity.

Special Note: May be repeated for a maximum of 6 credits.

Registration Restrictions: Graduate standing in Psychology, only with instructor permission.

Prerequisites: PSY A622 or concurrent enrollment and PSY A623.

PSY A667 Organizational Behavior Management 3 Credits

An advanced exploration of the behavior analytic strategies used to manage and improve employee performance in the workplace. Topics include in-depth analysis of effective staff training and support strategies, performance management, systems-level analysis, behavior-based safety, implementation science, and effective consultation strategies.

Special Note: Not available for credits to students who have completed PSY A467.

Registration Restrictions: Graduate standing

May Be Stacked With: PSY A467

Prerequisites: PSY A600.

PSY A670 Psychotherapy Internship 3 Credits

Supervised psychotherapy with clients in a variety of settings throughout the community.

Special Note: May be repeated twice for credit. A minimum of two successfully completed semesters (grade of B or better) is required for graduation. Placement at approved settings will be assigned according to the student's specialization and availability of sites.

Registration Restrictions: Admission to MS Clinical Psychology graduate program; candidacy status, only with instructor permission.

May Be Stacked With: PSY A653

Prerequisites: PSY A665 with a minimum grade of B.

PSY A671 Grant Writing 1,3 Credit

Provides hands-on training in developing, writing, and submitting grant proposals. Discusses components of the grant writing process with an emphasis on services grant writing for nonprofits and public agencies. Emphasizes research grant writing, with a focus on NIH grant application and review process, and secondary attention to NSF process.

Special Note: May be taken for 1 credit or 3 credits, with the 3-credit course requiring the preparation of a full proposal. If students are taking the 1-credit course and taking the 3-credit course, only 3 credits can be counted towards the degree.

Registration Restrictions: Graduate standing in Psychology

Prerequisites: PSY A639.

PSY A672 Practicum Placement - Community I 1-3 Credits

Community practicum experience that provides increased depth in applying theory to practice and improving skills as a community psychologist. Impact of cultural factors will be a major aspect of the practicum experience.

Special Note: May be repeated for a maximum of 6 credits.

Registration Restrictions: Admission to Ph.D. Program in Clinical-Community Psychology.

PSY A673 Practicum Placement - Community II 1-3 Credits

Advanced community practicum experience that provides hands-on opportunities to create depth and breadth in designing creative applications of theory to practice and independently applying and honing skills as a community psychologist. Impact of cultural factors will be a major aspect of the practicum experience.

Special Note: May be repeated for maximum of 6 credits.

Registration Restrictions: Admission to Ph.D. Program in Clinical-Community Psychology.

Prerequisites: PSY A672.

PSY A674 Advanced Family Therapy 3 Credits

Focuses on the assessment of families, and the process of family therapy through an examination of classic and contemporary family therapy theory, models, research and practice. A variety of therapeutic approaches will be presented. Students will identify their own theoretical style of family therapy.

Registration Restrictions: Graduate standing

Crosslisted With: SWK A674

Prerequisites: PSY A626 with a minimum grade of B or SWK A656 with a minimum grade of B.

PSY A676 Couples Therapy 3 Credits

Focuses on the assessment of couples and the process of couples therapy through an examination of classic and contemporary theory, models, research and practice. A variety of therapeutic approaches will be presented. Students will identify their own theoretical style of couples therapy.

Registration Restrictions: Graduate standing

Crosslisted With: SWK A676

Prerequisites: PSY A626 with a minimum grade of B or SWK A656 with a minimum grade of B.

PSY A677 Multidisciplinary Seminar in Children's Mental Health 1 Credit

Provides an interdisciplinary approach to working with children and families in a variety of behavioral/mental health and educational settings.

Special Note: Course is one credit per semester over two sequential semesters.

Registration Restrictions: Graduate standing

Crosslisted With: EDSE A677 and SWK A677

PSY A678 Advanced Applications of Behavior Analysis 3 Credits

An advanced exploration of topics in behavior analysis, emphasizing the role of the behavior analyst as a scientist-practitioner. Topics will include in-depth analysis of the philosophical history of behaviorism, modern behavioral research and application of behavior analysis to socially relevant problems.

Special Note: Not available for credit to students who have completed PSY A478.

Registration Restrictions: Graduate standing

May Be Stacked With: PSY A478

Prerequisites: PSY A600.

PSY A679 Multicultural Psychological Assessment I 3 Credits

Introduces administration, scoring, and interpretation of various intellectual and objective personality assessment instruments, as well as their psychometric properties, for children and adults. Emphasis on the meaningful integration of test results into a culturally sensitive assessment report. Highlights professional and ethical issues related to multicultural practices emphasizing Alaska Natives.

Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology.

Prerequisites: PSY A633.

PSY A681 Substances of Abuse in Alaska 1 Credit

An overview of the most prevalent substances of abuse in Alaska, including physical, psychological, social, and medical consequences of use and abuse.

Registration Restrictions: Graduate standing in psychology or related field. Instructor permission available for individuals with professional experience in substance abuse treatment.

PSY A682 Clinical Interventions for Substance Abuse 1 Credit

Contemporary approaches to substance abuse treatment. Emphasis is on conceptualizing substance abuse as a continuum from intervention to after-care. Focus of the course is designed around the study of therapeutic communities in the Anchorage area.

Registration Restrictions: Graduate standing in psychology or related field. Instructor permission available for individuals with professional experience in substance abuse treatment.

PSY A683 Substance Abuse Assessment and Treatment Planning 1 Credit

Assessment, measurement issues, and treatment planning in the context of clinical work with substance abusing individuals.

Registration Restrictions: Graduate standing in psychology or related field. Instructor permission available for individuals with professional experience in substance abuse treatment.

PSY A684 Clinical Supervision and Consultation 3 Credits

Familiarizes students with the clinical, ethical, and cultural issues involved in supervision and consultation. Examines contemporary, empirically supported information regarding various approaches to and models of supervision and consultation. Covers both the relationship inherent in clinical supervision and consultation, and training in leadership and supervision of and consultation with employees in other work settings.

Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology.

Prerequisites: PSY A653.

PSY A686 Predoctoral Internship 6 Credits

Deepens understanding and application of assessment and intervention techniques in diverse settings. Students are placed in clinical or community settings for 40 hours per week to apply and sharpen skills. Students work under a local supervisor who manages student caseloads and assignments in collaboration with the course instructor.

Special Note: Must be taken for three consecutive semesters.

Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology; approval of dissertation proposal; approval by the Director of Clinical Training

PSY A687 Multicultural Psychological Assessment II 3 Credits

Presents advanced psychological assessment tools including interviews, projective techniques and neurocognitive assessment. Emphasis on the integration of cognitive, personality and other test results derived from an assessment battery into a meaningful and culturally sensitive psychological assessment report.

Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology.

Prerequisites: PSY A679.

PSY A690 Advanced Topics in Psychology 1-3 Credits

Special topics of interest in psychology offered to those with graduate standing in psychology. Presented by researchers and/or behavioral health experts. Designed for graduate students seeking advanced training in special areas of clinical psychology. Specific titles to be announced.

Special Note: May be repeated for a maximum of 6 credits with change of subtitle.

Registration Restrictions: Graduate standing in psychology

May Be Stacked With: PSY A490 and PSY A492

PSY A691 Children's Mental Health Systems of Care 3 Credits

Expands systems of care as a coordinated network of community-based services and supports that are organized, multidisciplinary, and in partnership with youth and family. Addresses the cultural and linguistic needs of families in order to meet the challenges of children and youth with serious mental health needs.

Registration Restrictions: Graduate standing

Crosslisted With: EDSE A691 and SWK A691

PSY A695 Teaching Practicum in Psychology 3 Credits

Provides the psychology student an opportunity to learn basic principles of classroom teaching under close faculty supervision. Responsibilities include lecture preparation, exam construction, lecturing, grading, and other teaching-related tasks as agreed upon by the student and supervising faculty in a written contract.

Special Note: May be repeated once for credit.

Registration Restrictions: Graduate standing in Psychology; faculty permission.

PSY A698 Individual Research 1-3 Credits

Individual research activities, such as literature reviews, protocol development, and pilot studies, conducted under faculty supervision. May alternatively include individual contributions to team research projects.

Special Note: May be repeated for a maximum of 3 credits.

Registration Restrictions: Admission to graduate studies in Psychology and faculty permission.

PSY A699 Thesis 1-6 Credits

Independent project under the supervision of a thesis advisor and thesis committee, culminating in a document prepared to publication standards.

Registration Restrictions: Candidacy status and permission of thesis chair.

Prerequisites: PSY A639.

PSY A699D Dissertation 1-9 Credits

Involves independent empirical research under the supervision of an individual dissertation committee. Culminates in a document prepared to publication standards and a public presentation.

Special Note: Students may enroll for variable credit, but 18 credits are both the minimum required and the maximum allowed for graduation.

Registration Restrictions: Admission to the Ph.D. Program in Clinical-Community Psychology; passage of Research Competency; approval by the Director of Clinical Training.

Public Administration (PADM)

Courses

PADM A601 Introduction to Public Administration 3 Credits

Introduction to the field of public administration. Deals with the scope, nature, history, current context, and basic tools in the study of public administration. Topics covered include social, economic, and political environments of public administration, and comparative administration, bureaucratic politics, power and authority, law, ethics and administration, basic models, and comparative administration.

Special Note: Offered fall and spring semesters.

PADM A602 Seminar in Public Management 3 Credits

Focuses on tools and insights that support individual growth in ethical, effective, and efficient management abilities. Students are offered the opportunity for personal development in the context of understanding their own strengths and challenges as a manager in a diverse workforce.

Registration Restrictions: Graduate standing

PADM A603 Management Analysis 3 Credits

Introduction to organizational and systems analysis, systems theory, information systems, procedure analysis, management planning, and management problem solving.

Registration Restrictions: Faculty permission.

PADM A604 Research Methods in Public Administration 3 Credits

This course introduces methods of empirical research, including research design, survey sampling, data collection and statistical analysis. There is a special emphasis on communicating results of analysis to administrators, policymakers and the public.

Registration Restrictions: Introductory course in statistics with a minimum grade of C.

PADM A606 The Policymaking Process 3 Credits

Examines the skills, protocols and insights required to understand, and participate in the policymaking process. Offers a historical, theoretical, and practical framework for policymaking in a democratic society. Examines the internal and external forces that influence policy development and addresses practical and ethical decision-making considerations.

Registration Restrictions: Graduate standing.

PADM A608 Organizational Theory, Design and Development 3 Credits

Prepares students to navigate complex and changing organizational environments and to implement effective organizational design and development. Examines relationships between national events and political and cultural perceptions that impact public organizational environments. Offers a comprehensive framework of organizational theory, practical models and tools that develop organizational resilience.

Registration Restrictions: Graduate standing or instructor permission

PADM A610 Public and Non-Profit Organizational Behavior 3 Credits

Focuses on applying knowledge and practices of organizational development in public and non-profit institutions. Offers an understanding of human behavior in the workplace from individual, group and organizational perspectives. Examines a broad menu of behavior theory. Presents an in-depth study of organizational behaviors including concepts of motivation, leadership style, authority, collaboration and change.

Registration Restrictions: Graduate standing

PADM A620 Internship in Public Administration/Policy 1-3 Credits

Applied work experience in public administration or policy analysis. The course consists of the equivalent of three months of full-time work in an approved state, federal, local, or private agency, under the supervision of a senior agency employee in cooperation with a faculty advisor. An internship journal and a final internship report are required.

Special Note: Offered as demand warrants.

Registration Restrictions: Faculty permission

PADM A624 Human Resources Administration and Labor Relations 3 Credits

Presents a broad spectrum of practical skills, protocols, tools and regulations relating to human resource administration and labor relations in the public sector. Examines the legal requirements, historical context, and ethical underpinning of human resource management and labor relations.

Registration Restrictions: Graduate standing.

PADM A628 Public Financial Management 3 Credits

Introduction to the management and administration of public financial resources. The course focuses on finance issues currently faced by professionals who are responsible for administration of public funds.

Registration Restrictions: Graduate standing

PADM A632 Public Policy Analysis 3 Credits

Combines theory and practical approaches to public policy analysis. Students are trained to identify policy problems, to select an appropriate method for analysis and to analyze public policy options.

Registration Restrictions: Faculty permission. PADM A604 recommended.

PADM A640 Dispute Resolution 3 Credits

Reviews literature and principles of dispute resolution. Focuses on negotiation, mediation, and consensus building as ways to resolve individual conflicts, group conflicts, and public disputes.

Registration Restrictions: Graduate standing or permission of instructor

PADM A659 Public Administration Capstone 3 Credits

Demonstrates PADM student ability to synthesize MPA graduate-level coursework through a final capstone project. Refines student knowledge and skills to identify a client, define a topic, conduct research, and prepare and present a policy report. Integrates research, critical thinking and communication skills as well as experiential and theoretical learning.

Registration Restrictions: Successful completion of the MPA comprehensive core program.

PADM A671 Selected Topics in Public Administration 1-3 Credits

Analyzes selected public administration issues. Topics will be announced in the published class schedules.

Registration Restrictions: Faculty permission or graduate standing

PADM A688 Program Evaluation and Performance Measurement 3 Credits

Covers theory and practice of program evaluation and performance measurement. Course topics include: needs assessment techniques, an understanding of program logic models, research designs for program evaluation, qualitative and quantitative evaluation approaches, and cost benefit analysis. Development of performance measures, ethics and communicating findings are also covered.

Registration Restrictions: Graduate standing; one undergraduate or graduate statistics course; PADM A604 recommended

Radiologic Technology (RADT)

Courses

RADT A101 Fundamentals for Limited Radiography I 3 Credits

Introduces theory and application of diagnostic radiography for limited radiographers. Includes equipment operation and maintenance, image production, digital image receptors, and beam limitation devices.

Registration Restrictions: Departmental approval

RADT A102 Fundamentals for Limited Radiography II 3 Credits

Introduces theory and application of diagnostic radiography for limited radiographers. Includes medical and legal responsibilities of radiography, principles of radiation protection, and patient care and management.

Registration Restrictions: Departmental approval

RADT A103 Procedures for Limited Radiography I 3 Credits

Introduces theory and application of diagnostic radiography for limited radiographers to include radiographic terminology, anatomy, positioning, evaluation criteria of limited radiography exams and concepts of radiation protection.

Registration Restrictions: Departmental approval

Prerequisites: RADT A101 and RADT A102.

RADT A104 Procedures for Limited Radiography II 2 Credits

Completion of discussions on the theory and application of diagnostic radiography for limited radiographers to include radiographic terminology, anatomy, positioning and evaluation criteria of limited radiography exams.

Registration Restrictions: Departmental approval

Prerequisites: RADT A103.

RADT A111 Introduction to Radiologic Technology and Patient Care 3 Credits

Provides an overview of radiography and the practitioner's role in the health care delivery system. Examines principles, practices, and policies of professionalism, basic concepts of patient care, safety, and medical ethics and law as it relates to the profession.

Registration Restrictions: Departmental approval

RADT A131 Radiographic Procedures I 3 Credits

Provides instruction regarding basic principles of radiographic procedures in performing examinations of the chest, abdomen, skeleton, and pelvic girdle. Introduces the principles of radiation protection. Incorporates radiographic terminology and anatomy and allows for demonstration, practice, simulation and evaluation of techniques in a laboratory environment.

Registration Restrictions: Departmental approval

RADT A132 Radiographic Procedures II 3 Credits

Provides instruction regarding basic principles of radiographic procedures in performing examinations of the spine, bony thorax, alimentary tract, genitourinary system, and associated specialized procedures. Incorporates radiographic terminology and anatomy and allows for demonstration, practice, simulation, and evaluation of techniques in a laboratory environment.

Registration Restrictions: Department approval

Prerequisites: RADT A111 with a minimum grade of C and RADT A131 with a minimum grade of C and RADT A161 with a minimum grade of C.

RADT A133 Radiographic Procedures III 3 Credits

Provides instruction regarding basic principles of radiographic procedures in performing skull procedures and Computed Tomography for the radiographer. Introduces sectional anatomy for the radiographer and incorporates radiographic terminology and anatomy allowing for demonstration, practice, and evaluation of performance in a laboratory environment.

Registration Restrictions: Department approval.

Prerequisites: RADT A132 with a minimum grade of C.

RADT A151 Radiographic Physics 2 Credits

Provides fundamental knowledge of atomic structure and terminology. Includes the nature and characteristics of radiation, X-ray production and the fundamentals of photon interactions with matter.

Registration Restrictions: Department approval

RADT A161 Fundamentals of Medical Imaging 3 Credits

Provides an overview of the foundations of radiography. Establishes a knowledge base in radiographic equipment, design and factors that govern the image production process.

Registration Restrictions: Department approval

RADT A171 Fundamentals of Medical Imaging II 3 Credits

Introduces concepts that emphasize the importance of image standards, factors that affect image quality, image evaluation and critique. Principles regarding factors that influence the production and recording of radiographic and fluoroscopic images are emphasized.

Registration Restrictions: Department approval

Prerequisites: RADT A161.

RADT A195A Radiography Practicum I 2 Credits

Provides structured and supervised application of radiographic skills in a health care facility, including patient interaction in the performance of examinations, positions and projections. Provides opportunity for continued development of previously gained practicum experience. Duties are assigned by the UAA instructor/clinical educator and supervised by an ARRT registered radiologic technologist.

Registration Restrictions: Department approval.

Prerequisites: RADT A111 with a minimum grade of C and RADT A131 with a minimum grade of C and RADT A151 with a minimum grade of C and RADT A161 with a minimum grade of C.

RADT A195B Radiography Practicum II 6 Credits

Provides structured and supervised application of radiographic skills in a health care facility, including patient interaction in the performance of examinations, positions and projections. Provides opportunity for continued development of previously gained practicum experience. Duties are assigned by the UAA instructor/clinical educator and supervised by an ARRT registered radiologic technologist.

Registration Restrictions: Department approval

Prerequisites: RADT A132 with a minimum grade of C and RADT A171 with a minimum grade of C and RADT A195A with a minimum grade of P.

RADT A211 Radiologic Pharmacology and Drug Administration 1 Credit

Provides practical concepts of pharmacology. Explains theory and practice of basic techniques of venipuncture and the administration of diagnostic contrast agents and/or intravenous medications. Emphasizes appropriate delivery of patient care during procedures.

Registration Restrictions: Departmental approval

RADT A231 Sectional Anatomy for Diagnostic Imaging 3 Credits

In-depth study of human anatomy through the use of cross-sectional images. Includes anatomical structural relationships and classification of anatomical regions. Transverse, sagittal and coronal views of the head, neck, thorax, abdomen, pelvis and extremities will be correlated with CT and MRI images.

Registration Restrictions: Departmental approval.

RADT A251 Radiobiology and Protection 2 Credits

Provides a comprehensive overview of the principles of radiation biology and protection as they pertain to the interaction of radiation with living systems.

Registration Restrictions: Department approval

Prerequisites: RADT A171.

RADT A272 Ethics and Quality Control in Medical Imaging 2 Credits

Discusses management, collection and analysis of quality control data and test instrumentation. Includes governmental standards and guidelines that establish accreditation, licensure and provider standards. Explores ethics and law relating to the practice of medical imaging. Examines a variety of ethical and legal issues found in clinical practice.

Registration Restrictions: Department approval

RADT A280 Medical Imaging Pathology 3 Credits

Introduces theories of disease causation and the pathophysiologic disorders. Presents etiology, pathophysiologic responses, clinical manifestations, radiographic appearance, and management of alterations in body systems. Includes multiple imaging modalities for pathologic correlation.

Registration Restrictions: Departmental approval.

RADT A282 Current Issues in Radiologic Technology 1 Credit

Explores current trends in radiologic technology that may include technical, social, political or economic aspects of radiologic technology.

Registration Restrictions: Departmental approval

RADT A295A Radiography Practicum IV 5 Credits

Provides opportunities for direct and indirect supervised development of radiographic skills in a health care facility, including patient interaction in the performance of select radiographic examinations. Continues the development of previously learned clinical skills.

Registration Restrictions: Departmental approval

Prerequisites: RADT A195C.

RADT A295B Radiography Practicum V 5 Credits

Provides continued opportunities for direct and indirect supervised development of radiographic skills in a health care facility, including patient interaction in the performance of select radiographic examinations. Continues the development of previously learned clinical skills. Concludes the development of career entry skills for the radiologic technologist.

Registration Restrictions: Departmental approval

Prerequisites: RADT A295A.

RADT A311 Mammography for Imaging Professionals 2,3 Credits

Provides knowledge and skills required of a certified mammographer. Provides the necessary didactic requirements (30 hours) and practicum requirements (45 hours) for mammography associated with the Food and Drug Administration (FDA) Mammography Quality Standards Act required by the Federal government. Prepares the students to sit for the ARRT National Certification Examination, which is required by the MQSA Standards.

Special Note: This course may be taken as a 2-credit course (30 hours didactic only) or as a 3-credit course (30 hours didactic plus 45 hours practicum).

Registration Restrictions: Registered or registry-eligible technologist or instructor permission.

Refrigeration & Heating (RH)

Courses

RH A101 Refrigeration and Air Conditioning Fundamentals 4 Credits

Explores compressors, condensers, evaporators, metering devices and related components. Offers instruction in the proper use of tools and testing devices applicable to the refrigeration and air-conditioning trades and experimentation with refrigeration system training devices. Provides instruction and experience on piping layout and assembly. Provides students with practice at swaging, flaring, bending, soldering and brazing. Includes instruction on the design, construction, troubleshooting, service and repair of household refrigerators and freezers.

RH A103 Technical Mathematics for Industrial Trades 3 Credits

Focuses on mathematics as applied to trade and vocational work. Covers fractions, decimals, percentage, powers of numbers, and basic algebraic elements. Also explores geometric concepts, ratios and proportions, scale drawings, and trigonometric functions.

RH A105 Electrical Circuits for Refrigeration and Heating I 3 Credits

Explores the fundamentals of electricity, electrical safety, magnetism and its association with electricity, Ohm's Law, series and parallel circuits, capacitance, inductance, resistance, transformers, and AC-DC motors and power factor. Introduces schematics and wiring diagrams, units of electrical measurement, and the use of meters to analyze circuits.

RH A109 Principles of Thermodynamics 3 Credits

Focuses on physical laws applied to refrigeration and heating. Introduces practical aspects of states of matter, energy forms, pressure, psychrometrics, pressure/enthalpy measurements, load calculations, heat quantities, heat transfer, insulation factors and coefficients, gas laws, and heat and water vapor flow through structures.

Corequisites: RH A103.

RH A122 Refrigeration and Air Conditioning 4 Credits

Introduces and analyzes properties and applications of common refrigerants. Explores mechanical cooling systems for air conditioning and refrigeration and discusses various alternative cooling methods. Emphasizes safe refrigerant handling and preparation for the EPA Section 608 certification exam. Guides students through the process of building functional refrigeration systems in the lab and learning to properly adjust and maintain refrigeration equipment.

Prerequisites: RH A101 and RH A109.

RH A126 Electrical Circuits for Refrigeration and Heating II 3 Credits

Emphasizes how to interpret schematic wiring diagrams and control circuits. Covers conductor sizing and motor protection for single-phase and three-phase motors. Builds understanding of electro-mechanical controls and introduces solid state controls for HVAC/R systems. Lab projects provide opportunities for practical application of course content.

Prerequisites: RH A103 and RH A105.

RH A132 Troubleshooting for HVAC/R Systems 3 Credits

Emphasizes systematic analysis and troubleshooting of HVAC/R systems to include mechanical, piping, electrical, and control systems with heavy emphasis on lab activities and training devices. Uses actual equipment with component faults to strengthen and test troubleshooting skills.

Prerequisites: RH A101 and RH A105 and RH A109.

RH A201 Commercial and Ammonia Refrigeration 4 Credits

Covers commercial refrigeration systems, including ammonia refrigeration, CO2 refrigeration, components unique to commercial and industrial refrigeration, ice makers and ice making equipment, grocery store display cases, compressor racks, defrost methods, lubrication systems and oil return, effects of system contaminants, and pipe sizing. Introduces the safe startup and operation of a liquid overfeed ammonia refrigeration system.

Prerequisites: RH A122 and RH A126.

RH A203 HVAC/R Basic Controls 3 Credits

Introduces concepts and components of basic residential and commercial heating and cooling control applications. Explores primary burner controls for forced air and hydronic control systems. Lab projects give practical application to the knowledge covered in the course.

Prerequisites: RH A126 and RH A132.

RH A209 Codes for HVAC/R 2 Credits

Introduces current mechanical codes as adopted by the State of Alaska and covers sections of the International Mechanical Code related to general heating, ventilation, and air conditioning work.

RH A211 Customer Relations and Job Etiquette 1 Credit

Explores methods, protocols, and techniques for building and maintaining positive relationships with customers. Identifies a variety of characteristics and related behaviors required of a successful and productive HVAC/R technician.

RH A225 Heating Fundamentals and Forced Air Heat 4 Credits

Introduces knowledge and skills needed for the installation and service of forced air heating systems. Covers beginning maintenance and installation to advanced troubleshooting of heating systems.

Prerequisites: RH A109.

RH A226 Commercial HVAC/R Systems 4 Credits

Introduces commercial heating, ventilation, and air conditioning systems by category and application. Includes both air-side and water-side systems, along with humidification, ventilation, and air filtration requirements.

Prerequisites: RH A225.

RH A228 Advanced Hydronic Heat Systems 4 Credits

Explores hydronic heating sources and emitters. Covers residential and light commercial boilers and hydronic heating systems. Includes radiant panel heating, emphasizing wiring and troubleshooting of hydronic controls.

Prerequisites: RH A225.

RH A229 HVAC/R Control Systems 3 Credits

Surveys heating, ventilation, and air conditioning control systems and control theory. Topics will include pneumatic, electronic, and direct digital control (DDC) systems.

Prerequisites: RH A203.

RH A232 HVAC/R Sheet Metal 3 Credits

Introduces the fundamentals of air handling. Covers layout, cutting, forming and fabricating of sheet metal. Reviews Sheet Metal and Air Conditioning Contractors National Association (SMACNA) Duct Construction standards.

RH A290 Selected Topics in Refrigeration and Heating 1-3 Credits

Covers topics in heating, ventilating, air conditioning, and refrigeration (HVAC/R) such as theory, problem solving, system operation, economic analysis, specialized applications, and performance optimization.

Special Note: May be repeated up to 6 credits with change of subtitle.

Renewable Energy (RE)

Courses

RE A100 Introduction to Sustainable Energy 3 Credits

Introduces students to the field of sustainable energy. Topics include current energy use, principles of energy conservation and efficiency, renewable energy resources, technologies, storage and hardware options, regulations, applicable codes, and career pathways.

RE A102 Applied Physics for Sustainable Energy 3 Credits

Introductory course for students considering a career in sustainable energy. Includes the physical principles for energy efficiency and various renewable energy technologies, including solar, wind, hydropower and geothermal. Demonstrates how the principles of physics relate to the design, basic operation, advantages and limitations of sustainable energy projects.

Registration Restrictions: Placement into MATH A055 or higher

Prerequisites: RE A100 or concurrent enrollment.

RE A110 Introduction to Solar Photovoltaic Systems 1 Credit

Presents basics of design and installation of solar photovoltaic (PV) systems with an emphasis on residential-scale systems. Introduces physics related to solar energy, ways of harvesting solar energy, sizing a PV system, energy storage vs. grid-tie, system components, installation options, cost/benefit considerations, and safety.

RE A120 Introduction to Solar Hot Water Systems 1 Credit

Presents basics of design and installation of solar thermal hot water systems with emphasis on residential-scale systems. Introduces physics related to solar thermal energy, ways of harvesting solar energy, sizing solar thermal systems, and uses in domestic hot water and space heat applications. Includes energy storage, system components, installation techniques, cost/benefit considerations, and safety.

RE A130 Introduction to Small Wind Systems 1 Credit

Presents basics of the design, installation and operation of small wind systems with an emphasis on residential-scale systems. Introduces physics related to wind energy, ways of harvesting and using wind energy, turbine and site selection, energy storage vs. grid-tie considerations, system components, installation techniques, cost/benefit considerations, and safety.

RE A140 Home Energy Basics 1 Credit

Presents an overview of space heating and electricity use and production for Alaskan homes and small businesses. Includes fundamentals of building energy flows, energy efficiency and methods for decreasing fossil fuel consumption. Introduces the relationship between efficiency measures and renewable energy systems.

RE A150 Basics of Ground-Source Heat Pump Systems 1 Credit

Presents basics of ground-source heat pump geexchange systems and their use for space heating and cooling and domestic hot water production. Introduces physical concepts related to harvesting shallow geothermal energy, system components, common installation configurations, cost/benefit considerations and safety.

RE A160 Basics of Biodiesel and Vegetable Oil Fuel Systems 1 Credit

Presents biodiesel processing techniques and straight vegetable oil (SVO) fuel systems and their use in Alaska. Introduces the science of biodiesel and SVO systems, including use of fish oil. Examines safe production techniques, different types of processors and SVO systems, and issues with emissions, collection, and storage.

Special Note: Students will make their own small batches of biodiesel.

RE A203 Sustainable Energy Project Development 3 Credits

Synthesizes facets of project development and management within the context of sustainable energy projects.

Prerequisites: RE A100.

RE A210 Cold Climate Construction 3 Credits

Covers design, construction and basic building science related to understanding, planning, and constructing or retrofitting a durable home in a difficult climate.

Special Note: Upon satisfactory completion, this course meets the prerequisite for the State of Alaska Contractor Residential Endorsement and provides 16 continuing education credits by the State of Alaska Division of Occupational Licensing for General Contractors with Residential Endorsements.

RE A290 Selected Topics in Sustainable Energy 1-4 Credits

Various topics of interest related to sustainable energy systems and development, including energy conservation, energy efficiency and renewable energy production.

Special Note: May be repeated for a maximum of 9 credits with a change in subtitle.

Russian (RUSS)

Courses

RUSS A101 Elementary Russian I 4 Credits

Introductory course for students with no previous knowledge of the Russian language. Develops listening, speaking, reading, and writing skills in Russian for effective communication at the elementary level. Students gain understanding of basic cross-cultural perspectives. Course conducted in Russian.

Attributes: UAA Humanities GER.

RUSS A102 Elementary Russian II 4 Credits

Continuation of introductory course. Further develops elementary listening, speaking, reading, and writing skills in Russian for effective communication. Enhances appreciation of cross-cultural perspectives. Course conducted in Russian.

Prerequisites: RUSS A101.

Attributes: UAA Humanities GER.

RUSS A201 Intermediate Russian I 4 Credits

Intermediate course for students with basic knowledge of Russian. Enhances listening, speaking, reading, and writing skills for effective communication at the intermediate level. Students critically examine diverse cultural perspectives. Course conducted in Russian.

Prerequisites: RUSS A102.

Attributes: UAA Humanities GER.

RUSS A202 Intermediate Russian II 4 Credits

Continuation of first semester in intermediate Russian. Further develops listening, speaking, reading, and writing proficiency for effective communication and in preparation for advanced study of Russian. Students interpret diverse cultural perspectives. Course conducted in Russian.

Prerequisites: RUSS A201.

Attributes: UAA Humanities GER.

RUSS A205 Conversational Skills II 1 Credit

A maintenance and skills enhancement course for intermediate students of Russian, designed primarily to help them to retain and solidify what they have learned in Elementary Russian. With the focus on oral communication, the course emphasizes speaking, listening comprehension, and vocabulary building.

Special Note: May be repeated once for credit.

Registration Restrictions: Proficiency as after two semesters of college-level or two years of high school study in Russian.

RUSS A301 Advanced Russian I 4 Credits

Advanced Russian course in refining listening, speaking, reading, writing and analytical skills for effective interaction in communicatively complex situations. Students critically analyze diverse cultural topics.

Special Note: Course conducted in Russian.

Registration Restrictions: If prerequisite not met, students can gain entrance to course with departmental approval.

Prerequisites: RUSS A202 with a minimum grade of C.

Attributes: UAA Humanities GER.

RUSS A302 Advanced Russian II 4 Credits

Continuation of first semester in advanced Russian. Further refines listening, speaking, reading, writing and analytical skills for effective interaction in communicatively complex situations. Students critically analyze diverse cultural topics.

Special Note: Course conducted in Russian.

Registration Restrictions: If prerequisite not met, students can gain entrance to course with departmental approval.

Prerequisites: RUSS A301 with a minimum grade of C.

Attributes: UAA Humanities GER.

RUSS A390 Selected Topics in Advanced Russian 3 Credits

An advanced course for students interested in conversation, listening and writing practice, advanced topics in grammar, and cultural information about the Russian speaking world. Topics will vary.

Special Note: Course conducted in Russian. May be repeated for credit with a change of subtitle.

Registration Restrictions: RUSS A301 and RUSS A302 strongly recommended.

Prerequisites: RUSS A202.

RUSS A390B Topics in Advanced Language 1-3 Credits

A focused examination of a single aspect of the Russian language.

Special Note: May be offered in 1-, 2- or 3-credit segments. Repeatable for credit with a change of subtitle. Up to 3 credits can count toward a minor or major in Languages with an emphasis in Russian. Course conducted in Russian.

Prerequisites: RUSS A202.

RUSS A427 Post-Soviet Culture and Society 3 Credits

Interdisciplinary examination and analysis of contemporary Russian culture and society. Explores major themes in post-Soviet society including shifting identities and changing social, cultural, political, and economic realities, and examines how these are expressed in a variety of contemporary sources.

Special Note: Course conducted in English.

Registration Restrictions: Completion of all GER Tier 1 (basic college-level skills) courses and junior standing. Prerequisite HIST A102 or any RUSS prefix course.

Crosslisted With: HIST A427

Prerequisites: HIST A102.

Attributes: UAA Integrative Capstone GER.

RUSS A490 Selected Topics in Russian Culture 3 Credits

Focuses on critical analysis of diverse cultural and artistic traditions from Russian-speaking communities using a variety of disciplinary methodologies (e.g., historical, cultural, socio-political) and related terminology. Enhances Russian language skills in writing, reading, speaking, listening and cross-cultural literacy.

Special Note: May be repeated for credit with change in subtitle.

Course conducted in Russian.

Prerequisites: RUSS A302 with a minimum grade of C.

Social Work (SWK)

Courses**SWK A106 Introduction to Social Welfare 3 Credits**

Analyzes social inequality and the American social welfare system. Traces historical development of government response to social inequality. Explores historical and persisting dilemmas-ethical, political, social, and economic-explicit and implicit in social welfare provisioning. Develops understanding of social welfare problems and solutions.

Prerequisites: SOC A101 with a minimum grade of C.

Attributes: UAA Social Sciences GER.

SWK A206 Introduction to Social Work 3 Credits

Introduces the profession of social work and its fields of practice, roles, professional values and ethics, and guiding theories and perspectives. Highlights the profession's commitment to engaging diversity, serving at-risk populations, and advancing human rights and social and economic justice, especially within Alaska.

SWK A243 Cultural Diversity and Community Service Learning 3 Credits

Focuses on the intersection of multiple dimensions of difference and their relationship to oppression and privilege. Concepts introduced in the class will be applied to students' interactions with clients of community-based partner organizations as part of a required 20-hour service learning component.

Prerequisites: WRTG A111 with a minimum grade of C.

Attributes: UAA Social Sciences GER.

SWK A290 Special Topics in Social Work 1-3 Credits

Introduction to special topics related to social work practice.

Special Note: May be repeated for credit with a change of topics for a maximum of 6 credits.

SWK A330 Social Work Practice with Individuals 4 Credits

Develops generalist social work practice knowledge and skills for implementing the planned change process with individuals. Utilizes evidence-based practice guided by values, ethics, culture, research, theory, client preference and the needs of Alaska. Includes both lecture and a relationship-building and interviewing skills lab.

Prerequisites: SWK A206 with a minimum grade of C.

SWK A331 Social Work Practice with Organizations and Communities 3 Credits

Develops generalist social work practice knowledge and skills in implementing the planned change process with organizations and communities. Utilizes evidence-based practice guided by values, ethics, culture, research, theory, client preferences and the needs of Alaska.

Prerequisites: SWK A430 with a minimum grade of C.

Corequisites: SWK A495B.

SWK A342 Human Behavior in the Social Environment 3 Credits

Uses a multidimensional framework to assess the biological, psychological, social, cultural and spiritual dimensions of human behavior across the lifespan. Applies theories and perspectives to understand the behavior of individuals, families, groups, organizations, and communities and to guide practice with client systems.

Prerequisites: PSY A150 with a minimum grade of C and (BIOL A102 with a minimum grade of C or BIOL A111 with a minimum grade of C or BIOL A112 with a minimum grade of C or BIOL A108 with a minimum grade of C or LSIS A102 with a minimum grade of C or LSIS A201 with a minimum grade of C).

SWK A363 Great Books in Social Work 3 Credits

Focuses on the directed reading of a social work text which has enduring significance for the profession, supplemented by other readings. The focal text and supplemental readings will vary with the instructor.

Prerequisites: WRTG A111 or SWK A106.

SWK A406 Social Welfare: Policies and Issues 3 Credits

Prepares students to assess, analyze, formulate, and advocate for empirically supported policies that advance social and economic justice and to collaborate with colleagues and clients to carry out effective policy action.

Special Note: Offered concurrent with the Alaska Legislature session.

Registration Restrictions: Admission to the Bachelor of Social Work program

Prerequisites: SWK A106 with a minimum grade of C.

Attributes: UAA Integrative Capstone GER.

SWK A409 Introduction to Child Welfare 3 Credits

Provides an in-depth overview of child welfare policies, public and private social services, and empirically supported child welfare practices within the context of the social work profession.

Prerequisites: EDSE A212 with a minimum grade of C or PSY A150 with a minimum grade of C.

SWK A410 Trauma in Childhood 3 Credits

Provides students with an understanding of the psychobiological, developmental and social implications of trauma exposure throughout childhood and adolescence. Introduces students to the principles of prevention, intervention and resiliency as related to childhood trauma.

Prerequisites: EDSE A212 or PSY A365.

SWK A424 Social Work Research 3 Credits

Introduces quantitative and qualitative research methods. Provides a foundation for evaluating and utilizing research findings to employ the evidence-based practice process, evaluate social work practice outcomes, and to improve social work services and service delivery.

Prerequisites: SWK A206 with a minimum grade of C.

SWK A429 Trauma and Crisis Intervention in Social Work Practice 3 Credits

Presents the historical and theoretical basis of trauma and crisis intervention within the context of generalist social work practice.

Prepares students to utilize empirically-supported approaches to engage, assess, intervene, and evaluate services with individuals, families, and communities experiencing trauma and crisis. Special vulnerabilities and ethical concerns for at-risk populations are examined.

Registration Restrictions: Admission to the Bachelor of Social Work program

Prerequisites: SWK A430 with a minimum grade of C.

Corequisites: SWK A495A.

SWK A430 Social Work Practice with Families and Groups 3 Credits

Develops generalist social work practice knowledge and skills in implementing the planned change process with families and groups. Extends the use of evidence-based practice that is guided by values, ethics, culture, research, theory, client preferences, and the needs of Alaskan families and groups.

Registration Restrictions: Admission to the Bachelor of Social Work program

Prerequisites: SWK A330 with a minimum grade of C.

SWK A440 Social Work Practice in Mental Health and Addictions 3 Credits

Preparation for work in a variety of social service settings in which clients may be coping with problems related to mental disorders and/or addiction. A research based analysis of addictions and mental disorders as they are manifested independently and in combination; and the impact of those disorders upon clients involved in a variety of service systems such as child welfare, corrections, and domestic violence.

Registration Restrictions: Junior or senior standing. Consent of instructor.

SWK A450 Child Protective Services 3 Credits

Prepares the student for entry level practice in Alaska's child protection system. Covers the knowledge and skills required to provide investigation, protection, family preservation and permanency planning services to children who have been abused and/or neglected and their families.

Registration Restrictions: Junior or senior standing. Consent of instructor.

SWK A473 Geriatric Social Work Practice 3 Credits

Covers the knowledge, skills and values needed for effective social work practice with older adults and their families. Students will have the opportunity to develop the capability for accurate multidimensional assessments and effective interventions with and on behalf of older adults and their families.

Registration Restrictions: Departmental approval

May Be Stacked With: SWK A673

SWK A481 Case Management in Social Work Practice 3 Credits

Enhances knowledge and skill development in delivering professional social work case management, care coordination, and discharge planning services to individuals and families. Emphasizes the planned change and evidence-based practice processes. Develops professional skills guided by social work values and ethics, cultural contexts, and the needs of Alaska.

Prerequisites: SWK A330 with a minimum grade of C.

Corequisites: SWK A482.

SWK A482 Writing for Social Work Practice 3 Credits

Applies professional writing skills to the documents of the social work profession. Emphasizes critical thinking and analysis in effective professional writing as required for generalist social work practice.

Prerequisites: SWK A330 with a minimum grade of C and (WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C).

Corequisites: SWK A481.

SWK A490 Selected Topics in Social Work 1-3 Credits

Focuses on current topics related to social work services, diverse client groups and field of practice.

Special Note: May be repeated for a maximum of 9 credits with a change in subtitle. Not available for credit to students who have completed SWK A690 with the same subtitle.

Registration Restrictions: Junior or senior level standing

May Be Stacked With: SWK A690

SWK A495A Social Work Practicum I 3 Credits

Student applies social work knowledge, skills, values, and ethics within an organization or community context. Emphasis is on integration and demonstration of the generalist competencies and practice behaviors. The student completes 224 practicum hours in an approved setting under the supervision of social work faculty and a field instructor appointed by the university.

Registration Restrictions: Admission to the Bachelor of Social Work program

Prerequisites: SWK A331.

Corequisites: SWK A429.

SWK A495B Social Work Practicum II 3 Credits

Student applies social work knowledge, skills, values, and ethics within an organization or community context. Emphasis is on continued integration and demonstration of the generalist competencies and practice behaviors. The student completes 224 practicum hours in an approved setting under the supervision of social work faculty and a field instructor appointed by the university.

Registration Restrictions: Admission to the Bachelor of Social Work program

Prerequisites: SWK A495A with a minimum grade of C.

Corequisites: SWK A331.

SWK A498 Advanced Community-Based Research 3 Credits

Application of research skills to a social welfare problem in collaboration with a community partner under the guidance of a faculty mentor. Projects must demonstrate advanced scholarship grounded in the theory and professional standards of social work practice.

Prerequisites: SWK A424.

SWK A607 Social Welfare Policy and Services 3 Credits

Prepares students for generalist social work policy practice as they learn to analyze, formulate and advocate for policies that advance social, economic, and environmental justice and to collaborate with colleagues, clients, and constituencies to carry out effective policy action.

Special Note: Course is offered concurrent with the Alaska Legislature session.

Registration Restrictions: Admission to the MSW program

SWK A608 Social Policy for Advanced Generalist Practice 3 Credits

Prepares practitioners for developing policies and programs in a political economy. Examines contemporary social needs in a diverse and inequitable society. Emphasizes roles of research and evaluation in a policy process.

Registration Restrictions: Admission to the MSW program with advanced standing or successful completion of the foundation curriculum.

SWK A624 Foundation Research Methods 4 Credits

Explores the strengths, weaknesses and challenges of quantitative and qualitative research methods and data analysis approaches. Provides a foundation for using research methods and findings to inform practice, engage in the evidence-based practice process, and evaluate programs and practice.

Registration Restrictions: Admission to the MSW program

SWK A628 Program Evaluation 3 Credits

Explores the principles and methods of conducting evaluation of health-related programs. Discusses topics such as conducting community needs assessment, program development, evaluation types and models, evaluation designs, politics and ethics of conducting evaluation in community-based settings, and how to effectively communicate the process involved in evaluation and the findings to stakeholders.

Registration Restrictions: Admission to MPH or MSW program or faculty approval; MSW students must have successfully completed the MSW foundation requirements.

Crosslisted With: HS A628

SWK A629 Advanced Generalist Practice I: Individuals 3 Credits

Develops clinical knowledge and skills to provide competent and effective services and interventions for individuals in Alaska. Focuses on the use of the planned change process through the application of theory and evidence-based practice knowledge.

Registration Restrictions: Admission to the MSW program with advanced standing or successful completion of the foundation curriculum.

SWK A630 Practice I: Individuals 3 Credits

Provides foundation generalist social work practice knowledge and skills for implementing the planned change process with individuals. Utilizes evidence-based practice guided by values, ethics, culture, research, theory, client preferences and the needs of Alaska.

Registration Restrictions: Admission to the MSW program

SWK A631 Introduction to Social Work Practice 3 Credits

Introduction to generalist social work practice, focusing on the use of the planned change and evidence-based practice processes with clients and systems in need of professional intervention. Emphasis is on professional identity, values and ethics in social work practice.

Registration Restrictions: Admission to the MSW program

SWK A632 Practice II: Families and Groups 3 Credits

Provides foundation generalist social work practice knowledge and skills in implementing the planned change process with families and groups. Utilizes evidence-based practice that is guided by values, ethics, culture, research, theory, client preferences, and the needs of Alaska's families and groups.

Registration Restrictions: Admission to the MSW Program

Prerequisites: SWK A631 with a minimum grade of C.

SWK A633 Advanced Generalist Practice II: Families and Groups 3 Credits

Focuses on the use of the planned change process through the application of theory and evidence-based practice knowledge to provide competent and effective clinical services and interventions for families and groups in Alaska.

Registration Restrictions: Admission to the MSW program with advanced standing or successful completion of the foundation curriculum.

Prerequisites: SWK A629 with a minimum grade of C.

SWK A634 Advanced Generalist Practice III: Organizations and Communities 3 Credits

Examines the practice of transformational leadership in social work practice with groups, organizations and communities in the process of innovation to address emerging or existing needs among at-risk and vulnerable populations. This course deepens the competencies of advanced generalist MSW students in innovation practice with groups, organizations and communities and prepares students to complete a capstone leadership project in SWK A635.

Registration Restrictions: Admission to the MSW program and successful completion of the generalist curriculum.

SWK A635 Advanced Generalist Integrative Seminar 3 Credits

Provides students with the opportunity to integrate eco-systemic theory and problem-solving approaches with direct and organizational practice through the completion of a literature review and a federal, state, municipal, or foundation grant RFP.

Registration Restrictions: Admission to the MSW program with advanced standing or successful completion of the foundation curriculum.

Prerequisites: SWK A634 with a minimum grade of C.

SWK A636 Practice III: Organizations and Communities 3 Credits

Provides foundation generalist social work practice knowledge and skills in implementing the planned change process with organizations and communities. Utilizes evidence-based practice guided by values, ethics, culture, research, theory, client preferences and the needs of Alaska.

Registration Restrictions: Admission to the MSW Program

SWK A638 Practice Evaluation Lab 1 Credit

Supports students with engaging in the evidence-based practice process while in the field practicum placement. Students develop and implement a plan for evaluating their social work practice with individuals, families, groups, or organizations.

Registration Restrictions: Admission to the MSW program with advanced standing or successful completion of the foundation curriculum.

Prerequisites: SWK A624 with a minimum grade of C.

SWK A639 Advanced Generalist Intensive Practicum 6 Credits

Advanced generalist block practicum in which student performs as an advanced generalist social worker within an organization and/or community context. Emphasis is on integration and demonstration of the advanced generalist competencies and practice behaviors. The student completes 480 hours in an approved setting under the supervision of a MSW field instructor.

Registration Restrictions: Admission to the MSW Program with concurrent enrollment in a MSW practice course

Prerequisites: SWK A629 with a minimum grade of C or concurrent enrollment.

SWK A641 Child Trauma 3 Credits

Understanding of the impact of trauma on children using contextual approach. Emphasis on child trauma from developmental, ecological, etiological, epidemiological, systemic, neurobiological, physiological, and psychodynamic approaches. Examine different theoretical approaches to child trauma and child trauma treatment and examine intervention approaches at the level of the individual, family and system. Emphasis on trauma in the context of attachment, relationships and development and issues related to diagnosis and assessment.

Registration Restrictions: Graduate standing

SWK A642 Human Behavior in the Social Environment 3 Credits

Advanced application of theoretical knowledge about human behavior across the life-span, the ranges of social systems in which people live and the ways social systems promote or deter people in maintaining or achieving health and well-being.

Registration Restrictions: Admission to the MSW program

SWK A643 Human Diversity in Social Work Practice 3 Credits

Examination of intersecting dimensions of human diversity in relation to oppression, privilege, power and the social justice commitments of social work generalist practice.

Registration Restrictions: Admission to the MSW Program

SWK A644 Social Work Practicum I 3 Credits

Part one of generalist practicum sequence. Emphasis is on integration and demonstration of the generalist competencies and practice behaviors. The student completes 240 practicum hours in an approved setting under the supervision of social work faculty and a MSW field instructor.

Registration Restrictions: Admission to the MSW program with concurrent enrollment in a MSW practice course

Corequisites: SWK A632.

SWK A645 Social Work Practicum II 3 Credits

Part two of generalist practicum sequence. Emphasis is on integration and demonstration of the generalist competencies and practice behaviors. The student completes 240 practicum hours in an approved setting under the supervision of social work faculty and a MSW field instructor.

Registration Restrictions: Admission to the MSW Program

Prerequisites: SWK A644 with a minimum grade of C.

Corequisites: SWK A636.

SWK A646 Advanced Generalist Practicum I 3 Credits

Part one of advanced generalist practicum sequence. Emphasis is on integration and demonstration of the advanced generalist competencies and practice behaviors. The student completes 240 hours in an approved setting under the supervision of a MSW field instructor.

Registration Restrictions: Admission to the MSW program with concurrent enrollment in a MSW practice course

Prerequisites: SWK A629 with a minimum grade of C or concurrent enrollment.

SWK A647 Advanced Generalist Practicum II 3 Credits

Part two of advanced generalist practicum sequence. Emphasis is on integration and demonstration of the advanced generalist competencies and practice behaviors. The student completes 240 hours in an approved setting under the supervision of a MSW field instructor.

Registration Restrictions: Admission to the MSW Program

Prerequisites: SWK A646 with a minimum grade of C.

Corequisites: SWK A635.

SWK A648 Motivational Interviewing 3 Credits

Motivational Interviewing (MI) is an empirically-supported, person-centered, goal-oriented approach for facilitating change by exploring & resolving ambivalence. With background lectures on the theoretical and empirical bases of MI, class sessions emphasize demonstration and practice of MI skills and strategies for diverse behavioral applications (e.g., addictions, health promotion, chronic disease management).

Registration Restrictions: Graduate standing. HS A648 and PSY A648

SWK A651 Social Work Practice in Addictions and Mental Health 3 Credits

Preparation for work in a variety of social service settings in which clients may be coping with problems related to mental disorders and/or addiction. A research based analysis of addictions and mental disorders as they are manifested independently and in combination; and the impact of those disorders upon clients involved in a variety of service systems such as child welfare, corrections and domestic violence.

Registration Restrictions: Graduate standing.

SWK A654 Supervisory Management in Social Work 3 Credits

Prepares graduate students and practitioners for social work supervisory management roles. The course provides a theoretical framework for supervisory management methods and processes and will address essential knowledge, values, and skills in these professional functions. Issues of gender and race as it relates to supervisory management will also be explored.

Registration Restrictions: Graduate standing.

SWK A656 Treatment of Families 3 Credits

Explores a range of theories to inform social work practice with families and couples. The course traces the evolution of family systems theories and other perspectives with emphasis upon the development of skills to apply evidence based interventions with diverse families in need.

Registration Restrictions: Graduate standing.

SWK A659 Leadership and Decision Making in Social Work 3 Credits

Focuses on knowledge and skills related to leadership and decision making for potential leaders of social service organizations. Emphases include leadership theory, analysis of leadership styles, decision making theory and techniques. Issues of gender and race as they relate to leadership and decision making will also be explored.

Registration Restrictions: Graduate standing.

SWK A660 Financial Leadership for Social Work Administrators 2 Credits

Focuses on the budgeting process and how it relates to social service program planning, accounting methods and procedures, financial evaluation, and financial accountability. Values and ethics relating to financial administration in the nonprofit sector are emphasized. Gender and race and their interpersonal/social influences on the financial management process are explored.

Registration Restrictions: Graduate standing.

Prerequisites: SWK A634.

SWK A661 Marketing in the Social Sector 2 Credits

Focuses on the nature, role, and relevance of social sector marketing, the nature of public relations activities, the major concepts and tools to analyze an organization's markets, and potential strategies/guidelines for the development and implementation of marketing programs.

Registration Restrictions: Graduate standing.

SWK A662 Financial Resource Development for Social Services 2 Credits

Explores the planning, conducting, and evaluation of fundraising activities, the development of mission-based fundraising, donor identification and relations, spectrum-wide fundraising (in-kind support, private support, private/public grants), social entrepreneurship and fundraising ethics and accountability.

Registration Restrictions: Graduate standing.

SWK A663 Clinical Social Work with Children and Adolescents 2-3 Credits

Preparation for clinical work with children, adolescents and their families. Review of fundamental issues in child and adolescent development will provide the groundwork for development of effective assessment and treatment skills. Emphasis will be placed upon understanding the child/adolescent within the family, community, and cultural context, incorporating these factors into treatment approaches and planning.

Registration Restrictions: Graduate standing

SWK A666 Family Development 3 Credits

Explores the reciprocal relationships of individuals and systems on family growth and development across the life cycle. Examines the impact of individual family members, extended family, community, cultural group and larger society on family development.

Registration Restrictions: Graduate standing

SWK A672 Social Work with Families and Couples 2 Credits

Prepares students for the application of family and couple therapy in clinical settings. Theoretical concepts, assessment methods, and intervention techniques will provide students the ability to formulate interventions with families and couples.

Registration Restrictions: Graduate standing.

Prerequisites: SWK A656.

SWK A673 Geriatric Social Work Practice 3 Credits

Covers the knowledge, skills and values needed for effective social work practice with older adults and their families. Students will have the opportunity to develop the capability for accurate multidimensional assessments and effective interventions with and on behalf of older adults and their families.

Registration Restrictions: Graduate standing

May Be Stacked With: SWK A473

SWK A674 Advanced Family Therapy 3 Credits

Focuses on the assessment of families, and the process of family therapy through an examination of classic and contemporary family therapy theory, models, research and practice. A variety of therapeutic approaches will be presented. Students will identify their own theoretical style of family therapy.

Registration Restrictions: Graduate standing

Crosslisted With: PSY A674

Prerequisites: PSY A626 with a minimum grade of B or SWK A656 with a minimum grade of B.

SWK A676 Couples Therapy 3 Credits

Focuses on the assessment of couples and the process of couples therapy through an examination of classic and contemporary theory, models, research and practice. A variety of therapeutic approaches will be presented. Students will identify their own theoretical style of couples therapy.

Registration Restrictions: Graduate standing

Crosslisted With: PSY A676

Prerequisites: PSY A626 with a minimum grade of B or SWK A656 with a minimum grade of B.

SWK A677 Multidisciplinary Seminar in Children's Mental Health 1 Credit

Provides an interdisciplinary approach to working with children and families in a variety of behavioral/mental health and educational settings.

Special Note: Course is one credit per semester over two sequential semesters.

Registration Restrictions: Graduate standing

Crosslisted With: EDSE A677 and PSY A677

SWK A683 Innovative Practices in Telehealth 3 Credits

Provides an overview of telehealth with an emphasis on telebehavioral health in Alaska. Includes topics on the history of telehealth and current legal, technical and logistical considerations to prepare leaders in the expanding field of telehealth. Includes hands-on experience with telehealth technology and clinical exercises.

Registration Restrictions: Graduate standing or instructor permission.

Crosslisted With: HS A683

SWK A685 Social Work Services in Schools 3 Credits

Explores the multiple roles practiced by social workers who provide social work services in a school setting with special emphasis on practice with populations at risk and culturally diverse students and families.

Registration Restrictions: Graduate standing in social work or related discipline

SWK A690 Selected Topics in Social Work 1-3 Credits

Focus on current topics related to social work with various system levels (individuals, families, groups, communities and organizations), fields of practice and settings.

Special Note: May be repeated for credit with a different subtitle for a maximum of 9 credits. Not available for credit to students who have completed SWK A490 with the same subtitle.

Registration Restrictions: Graduate standing

May Be Stacked With: SWK A490

SWK A691 Children's Mental Health Systems of Care 3 Credits

Expands systems of care as a coordinated network of community-based services and supports that are organized, multidisciplinary, and in partnership with youth and family. Addresses the cultural and linguistic needs of families in order to meet the challenges of children and youth with serious mental health needs.

Registration Restrictions: Graduate standing

Crosslisted With: EDSE A691 and PSY A691

SWK A698 MSW Research Seminar 3 Credits

Students use practice knowledge to inform and complete an applied research study or program evaluation. Involves the conceptualization, design, implementation and dissemination of results.

Registration Restrictions: Admission to the MSW program with advanced standing or successful completion of the foundation curriculum.

Prerequisites: HS A628 with a minimum grade of C or SWK A628 with a minimum grade of C.

Sociology (SOC)

Courses

SOC A101 Introduction to Sociology 3 Credits

Introduction to science of humans as social animals, emphasizing social processes which give rise to and shape human's language, experiences, perception, meaning, and behavior. Multiple frameworks used in understanding and predicting human behavior.

Special Note: Offered fall and spring semesters.

Attributes: UAA Social Sciences GER.

SOC A110 Introduction to Gerontology: Multidisciplinary Approach 3 Credits

A multidisciplinary course that provides an introduction to gerontology. Covers many aspects of aging including those associated with biology, physiology, medical care, psychology, culture, sociology, and social policies.

Attributes: UAA Social Sciences GER.

SOC A201 Social Problems and Solutions 3 Credits

Survey of contemporary social problems. Focuses on the causes and consequences of social problems and examines processes through which social problems are identified, prioritized, and addressed.

Attributes: UAA Social Sciences GER.

SOC A202 Social Institutions 3 Credits

Applies sociological perspectives, theories, and methodologies to the study of social institutions, including family, education, economy, government, and religion, to examine the ways in which social institutions shape the social organization of society.

Attributes: UAA Social Sciences GER.

SOC A242 Introduction to Family, Marriage, and Intimate Relationships 3 Credits

Introduction to sociological study of family, marriage, and other intimate relationships. Also explores impact of gender roles, ethnicity and racial background on beliefs, values, attitudes, and behaviors.

Prerequisites: SOC A101 or PSY A111.

SOC A250 Guns in American Society 3 Credits

Focuses on the use of firearms in recreation, self-defense and crime with an introduction to relevant empirical research. Offers historical and comparative perspectives on U.S. firearms with an emphasis on the social context in which competing groups work to shape and balance concerns about civil rights and public safety.

SOC A251 Crime and Delinquency 3 Credits

Presents theoretical perspectives on the causes, consequences, and control of crime and delinquency. Surveys the major theoretical perspectives in the study of crime and delinquency with special attention to the application of empirical research methods to important theoretical issues.

Crosslisted With: JUST A251

Attributes: UAA Social Sciences GER.

SOC A252 Women and Social Action 3 Credits

Examines the evolving role of women in contemporary organizations and social movements with an emphasis on leadership.

Crosslisted With: WS A252

Prerequisites: SOC A101 with a minimum grade of C or WS A200 with a minimum grade of C.

SOC A280 Contemporary Issues 3 Credits

Analysis of contemporary social issues from a variety of sociological perspectives.

Special Note: May be repeated twice for credit with a change in subtitle.

Prerequisites: SOC A101.

SOC A307 Demography 3 Credits

Analysis of world populations: growth and decline patterns, migratory trends and ecology; worldwide implications to current population growth; critical review of major theoretical contributions, with introduction to demographic methods.

Prerequisites: SOC A101.

SOC A309 Urban Sociology 3 Credits

Examines the social, cultural, demographic, and institutional components of metropolitan growth, suburbanization, and urban inequality. Designed to provide a multilevel perspective by addressing both macro- and micro-level phenomena ranging from large-scale urban development to small-scale urban ways of life.

Prerequisites: SOC A101.

SOC A310 Sociology of Aging 3 Credits

A comparative analysis of the social status and role of the aging in various societies with emphasis on problems of aging in contemporary U.S.

Prerequisites: SOC A101 or SOC A110.

SOC A342 Marriages and Families 3 Credits

Emphasizes theories and research that consider today's marital and family lifestyles, as well as class and cultural variations found in the U.S. and globally. Considers historical contexts, as well as traditional and nontraditional forms of marriages and families, including socialization of children.

Prerequisites: SOC A101 with a minimum grade of C.

Attributes: UAA Social Sciences GER.

SOC A343 Sociology of Deviant Behavior 3 Credits

A critical analysis of the social etiology of deviant behavior (both criminal and non-criminal) with an emphasis on the nature of group interaction and an examination of the institutions involved.

Prerequisites: SOC A101 with a minimum grade of C or SOC A201 with a minimum grade of C or SOC A202 with a minimum grade of C.

SOC A347 Sociology of Religion 3 Credits

A critical sociological analysis of religion that considers the historical, cultural, social, psychological and personal aspects of religious experience and organizations in relationship to contemporary social institutions.

Prerequisites: SOC A101 with a minimum grade of C.

SOC A351 Political Sociology 3 Credits

Introduction to the social aspects of politics and the nature and distribution of power in society. Examination of the dynamic relationship of the political process and the institutions of society.

Crosslisted With: PS A351.

Prerequisites: (WRTG A211 or WRTG A212 or WRTG A213 or WRTG A214) and (PS A102 or SOC A101).

Attributes: UAA Social Sciences GER.

SOC A361 Social Science Research Methods 3 Credits

Provides a firm grounding in rigorous and ethical social science research. Examines various social science research methods, including surveys, experiments, content analyses, interviews and focus groups, and explores methodological challenges, such as hypothesis testing, measurement issues and sampling strategies.

Crosslisted With: PS A361.

Prerequisites: SOC A101 or PS A102.

SOC A363 Social Stratification 3 Credits

Overview of social inequality across multiple dimensions such as wealth, power, prestige, race, sex, and class. Describes changing stratification patterns and investigates the causes and consequences of inequality.

Prerequisites: SOC A101.

SOC A370 Medical Sociology 3 Credits

Provides a historical and contemporary overview of selected social, political, and economic factors that influence the provision of health care in America. Focuses on the relationship between health care and race, sex, social stratification, and geographical location. Brief international comparisons with alternative for-profit and not-for-profit national health care systems.

Special Note: Offered alternate fall semesters.

Crosslisted With: HS A370.

Prerequisites: SOC A101.

SOC A377 Sociology of Gender 3 Credits

Examines gender as a system of beliefs and practices that create difference between females and males. Analyzes how that difference is created and maintained via social institutions and critiques the outcome of these arrangements.

Prerequisites: SOC A101 with a minimum grade of C.

SOC A380 Sociology of Globalization 3 Credits

Globalization refers to a variety of political, economic, cultural and social changes which transform the world through increasingly interconnected flows of information, capital, goods, services, labor and culture in dense global networks. This course covers the processes and consequences of globalization through an interdisciplinary framework.

Prerequisites: ANTH A101 with a minimum grade of C or ANTH A202 with a minimum grade of C or GEOG A101 with a minimum grade of C or INTL A101 with a minimum grade of C or SOC A101 with a minimum grade of C.

SOC A402 Social Theory 3 Credits

Historical and contemporary approaches to social theory; analysis of conceptual frameworks applied to the study of society and social interaction.

Registration Restrictions: Junior or senior standing.

Prerequisites: SOC A101.

SOC A404 Environmental Sociology 3 Credits

Examines how society is organized in ways that either contribute to sustainability or hinder it.

Prerequisites: SOC A101 with a minimum grade of C.

SOC A408 Sociology of Race and Ethnicity 3 Credits

Present status of ethnic, religious and national minorities and their changing sociological, economic, and political status.

Special Note: Offered spring semesters.

Prerequisites: SOC A101.

SOC A462 Social Science Statistics 4 Credits

Provides a foundation in descriptive and inferential statistics used in social science research. Students identify, calculate and interpret statistics using statistical software.

Special Note: It is recommended that students take an introductory statistics course prior to taking this course.

Prerequisites: SOC A307 with a minimum grade of C or PS A361 with a minimum grade of C or SOC A361 with a minimum grade of C.

SOC A487 Sociology Practicum 3 Credits

Student participates in field research project and/or community action/agency program that applies sociological training toward the amelioration of specific social problems. Student will attend a seminar, class, or individual meeting with the faculty member on a weekly basis and complete six hours in the field on an approved project or program. All students will be expected to participate in the design of the practicum, and to complete a term paper or progress report.

Special Note: May be repeated once for credit.

Registration Restrictions: Faculty permission.

SOC A488 Capstone Seminar 3 Credits

Overview of the discipline emphasizing synthesis of theory and research, critical reflection and evaluation, and recent developments in sociology with social action. Particular emphasis will be given to the integration of sociology with other social sciences.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and senior standing.

Prerequisites: (PS A361 with a minimum grade of C or SOC A361 with a minimum grade of C) and SOC A402 with a minimum grade of C.

Attributes: UAA Integrative Capstone GER.

SOC A490 Special Topics in Sociology 1-4 Credits

An intensive and detailed study of a topic in contemporary sociology in a seminar format.

Special Note: May be repeated for a maximum of 8 credits with a change of subtitle.

Registration Restrictions: Junior or senior standing

Prerequisites: SOC A101.

Spanish (SPAN)

Courses

SPAN A101 Elementary Spanish I 4 Credits

Introductory course for students with no previous knowledge of the Spanish language. Develops listening, speaking, reading, and writing skills in Spanish for effective communication at the elementary level. Students gain understanding of basic cross-cultural perspectives. Course conducted in Spanish.

Attributes: UAA Humanities GER.

SPAN A102 Elementary Spanish II 4 Credits

Continuation of introductory course. Further develops elementary listening, speaking, reading, and writing skills in Spanish for effective communication. Enhances appreciation of cross-cultural perspectives. Course conducted in Spanish.

Prerequisites: SPAN A101.

Attributes: UAA Humanities GER.

SPAN A201 Intermediate Spanish I 4 Credits

Intermediate course for students with basic knowledge of Spanish. Enhances listening, speaking, reading, and writing skills for effective communication at the intermediate level. Students critically examine diverse cultural perspectives. Course conducted in Spanish.

Prerequisites: SPAN A102.

Attributes: UAA Humanities GER.

SPAN A202 Intermediate Spanish II 4 Credits

Continuation of first semester in intermediate Spanish. Further develops listening, speaking, reading, and writing proficiency for effective communication and in preparation for advanced study of Spanish. Students interpret diverse cultural perspectives. Course conducted in Spanish.

Prerequisites: SPAN A201.

Attributes: UAA Humanities GER.

SPAN A301 Advanced Spanish I 4 Credits

Advanced Spanish course in refining listening, speaking, reading, writing, and analytical skills for effective interaction in communicatively complex situations. Students critically analyze diverse cultural topics.

Special Note: Course conducted in Spanish.

Registration Restrictions: If prerequisite not met, students can gain entrance to course with departmental approval.

Prerequisites: SPAN A202 with a minimum grade of C.

Attributes: UAA Humanities GER.

SPAN A302 Advanced Spanish II 4 Credits

Continuation of first semester in advanced Spanish. Further refines listening, speaking, reading, writing and analytical skills for effective interaction in communicatively complex situations. Students critically analyze diverse cultural topics.

Special Note: Course conducted in Spanish.

Registration Restrictions: If prerequisite not met, students can gain entrance to course with departmental approval.

Prerequisites: SPAN A301 with a minimum grade of C.

Attributes: UAA Humanities GER.

SPAN A310 Selected Topics: Literary Trends and Traditions 3 Credits

Focuses on diverse literary traditions of multiple Spanish-speaking communities. Critical analysis applied through a variety of disciplinary methodologies (e.g. historical, cultural, artistic). Terminology is explored and developed. Enhances Spanish language skills in writing, reading, speaking, listening and cultural literacy.

Special Note: May be repeated once for credit with a change of subtitle. Course conducted in Spanish.

Prerequisites: SPAN A302 with a minimum grade of C.

SPAN A320 Studies in Contemporary Hispanic Cultures 3 Credits

Examines contemporary Hispanic cultures through various media (printed, electronic and audiovisual). Critical analysis through a variety of disciplinary methodologies (e.g., historical, cultural, artistic); terminology also explored and developed. Additionally enhances Spanish language skills in writing, reading, speaking and listening.

Special Note: May be repeated once for credit with change of subtitle. Course conducted in Spanish.

Prerequisites: SPAN A302 with a minimum grade of C.

SPAN A390A Selected Topics: Studies in Translation and Interpretation 4 Credits

Advances language skills through translation and interpretation to and from Spanish and English, focusing on a specific field every time it is offered (e.g., medical Spanish, judicial/court Spanish, business Spanish, Spanish for social services, etc.). Enhances and refines reading, listening, writing, and speaking abilities.

Special Note: May be repeated twice for credit with a change in subtitle. Course conducted in Spanish.

Prerequisites: SPAN A302 with a minimum grade of C.

SPAN A432 Selected Topics: Studies in Hispanic Literature and Culture 3 Credits

Focuses on the intensive study of authors, literary movements, periods and genres in their historical and cultural contexts. Enhances Spanish language skills in reading, listening, writing, speaking and cultural literacy.

Special Note: May be repeated twice for credit with a change of subtitle. Course conducted in Spanish.

Prerequisites: SPAN A302 with a minimum grade of C.

SPAN A470 Spanish Linguistics: History of the Language 3 Credits

Focuses on the fundamental areas of Spanish linguistics: phonology, morphology, syntax, and semantics. The diachronic evolution of the Spanish language is examined from its origins in the Iberian Peninsula to its present manifestations spanning continents in a globalized world. Special attention is given to sociolinguistic theory as a means by which to analyze and understand linguistic change and dialectal variation as reflective of historical, political, and cultural influences.

Special Note: Course conducted in Spanish.

Prerequisites: SPAN A302 with a minimum grade of C.

SPAN A490 Selected Topics: Hispanic Culture and Civilization 3 Credits

Focuses on critical analysis of diverse artistic traditions from Spanish-speaking communities using a variety of disciplinary methodologies (e.g., historical, cultural, socio-political) and related terminology. Enhances Spanish language skills in writing, reading, speaking, listening and cross-cultural literacy.

Special Note: Course may be repeated twice for credit with a change of subtitle. Course conducted in Spanish.

Prerequisites: SPAN A302 with a minimum grade of C.

Statistics (STAT)

Courses

STAT A200 Elementary Statistics 3 Credits

Introduction to concepts and applications of elementary statistical methods. Topics include sampling, data analysis, descriptive statistics, elementary probability, probability and sampling distributions, confidence intervals, hypothesis testing, correlation, and simple linear regression.

Special Note: A student may apply no more than 3 credits from STAT A200 or BA A273 toward the graduation requirements for a baccalaureate degree.

Prerequisites: MATH A105 with a minimum grade of C or ALEKS Overall Test 1 with a score of 055 or ALEKS Overall Test 2 with a score of 055 or ALEKS Overall Test 3 with a score of 055 or ALEKS Overall Test 4 with a score of 055 or ALEKS Overall Test 5 with a score of 055.

Attributes: UAA Quantitative Skills GER.

STAT A253 Applied Statistics for the Sciences 4 Credits

Intensive survey course with applications for the sciences. Topics include descriptive statistics, probability, random variables, binomial, Poisson and normal distributions, estimation and hypothesis testing of common parameters, analysis of variance for single factor and two factors, correlation, and simple linear regression. A major statistical software package will be utilized.

Registration Restrictions: If prerequisite is not satisfied, an approved UAA placement test is required.

Prerequisites: MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A155 with a minimum grade of C or ALEKS Overall Test 1 with a score of 065 or ALEKS Overall Test 2 with a score of 065 or ALEKS Overall Test 3 with a score of 065 or ALEKS Overall Test 4 with a score of 065 or ALEKS Overall Test 5 with a score of 065.

Attributes: UAA Quantitative Skills GER.

STAT A307 Probability and Statistics 4 Credits

A calculus-based introduction to probability and statistics with emphasis on scientific applications. Topics include probability, probability distributions for discrete and continuous random variables, joint distributions, mathematical expectation, moment generators, functions of random variables, estimation, and the study of power and significance of hypothesis tests.

Prerequisites: MATH A221 with a minimum grade of C or MATH A252 with a minimum grade of C.

STAT A308 Intermediate Statistics for the Sciences 3 Credits

Introduction to statistical experimentation and research methods with applications to natural and social sciences. General concepts of estimation and inferences. Systematic coverage of more widely used statistical methods, including simple and multiple regression, single factor and multifactor analysis of variance, multiple comparisons, goodness of fit tests, contingency tables, nonparametric procedures, and power of tests. At least one major statistical software package is introduced to aid calculations required for many of the techniques. Students are expected to make a presentation in an applied field and complete a data-based project as part of the course requirement.

Registration Restrictions: 100-level natural sciences course and a 100-level social sciences course, junior standing, and completion of GER Tier 1 (basic college-level skills) courses.

Prerequisites: STAT A200 or STAT A253 or STAT A307.

Attributes: UAA Integrative Capstone GER.

STAT A401 Statistical Methods 3 Credits

Parametric and nonparametric statistical methods. Topics will include, but not be restricted to, contingency table analysis, goodness-of-fit tests, simple linear and multiple regression, curvilinear regression, logistic regression, design and analysis of single and multifactor experiments, and introduction to multivariate statistics.

Special Note: Not available for credit to students who have completed STAT A601.

May Be Stacked With: STAT A601

Prerequisites: STAT A253 with a minimum grade of C or STAT A308 with a minimum grade of C.

STAT A402 Scientific Sampling 3 Credits

Sampling methods including simple random, stratified, systematic and cluster sampling. Special emphasis on estimation procedures including ratio and regression methods, and topics selected from allocations, direct sampling, inverse sampling, randomized response sampling, computer simulation of random variates, bootstrap, jackknife, and cross-validation.

Special Note: Not available for credit to students who have completed STAT A602.

May Be Stacked With: STAT A602

Prerequisites: STAT A200 with a minimum grade of C or STAT A253 with a minimum grade of C or STAT A307 with a minimum grade of C.

STAT A403 Regression Analysis 3 Credits

Simple and multiple regression, statistical inferences in regression, matrix formulation of regression, polynomial regression, ridge regression, nonlinear regression and normal correlation models. A major statistical package is used as a tool to aid calculations required for many of the techniques.

Special Note: Not available for credit to students who have completed STAT A603.

May Be Stacked With: STAT A603

Prerequisites: STAT A308 with a minimum grade of C.

STAT A404 Analysis of Variance 3 Credits

Single-factor models, factor effects, nonparametric tests, two-factor models, random and mixed effects models, multifactor studies, analysis of covariance and selected experimental designs. A major statistical package is used as a tool to aid calculations required for many of the techniques.

Special Note: Not available for credit to students who have completed STAT A604.

May Be Stacked With: STAT A604

Prerequisites: STAT A308 with a minimum grade of C.

STAT A407 Time Series Analysis 3 Credits

Decomposition of time series, seasonal adjustment methods and index numbers. Forecasting models, including causal models, trend models and smoothing models. Autoregressive (AR) forecasting models, moving average (MA) forecasting models and integrated (ARIMA) forecasting models. A major statistical package is used as a tool to aid calculations required for many of the techniques.

Special Note: Not available for credit to students who have completed STAT A607.

May Be Stacked With: STAT A607

Prerequisites: STAT A307 with a minimum grade of C or STAT A308 with a minimum grade of C.

STAT A408 Multivariate Statistics 3 Credits

Multivariate statistical methods including exploratory data analysis, geometrical interpretation of multivariate data, multivariate tests of hypotheses, multivariate analysis of variance, multivariate multiple regression, principal components, factor analysis, discriminant analysis, cluster analysis and multidimensional scaling.

Special Note: Not available for credit to students who have completed STAT A608.

May Be Stacked With: STAT A608

Prerequisites: STAT A308 with a minimum grade of C.

STAT A601 Advanced Statistical Methods 3 Credits

Parametric and nonparametric statistical methods. Topics will include, but are not restricted to, contingency table analysis, goodness-of-fit tests, simple linear and multiple regression, curvilinear regression, logistic regression, design and analysis of single and multifactor experiments, and introduction to multivariate statistics. Students will be required to complete a major research project, conduct literature review, write a short paper and make a presentation in a public forum.

Special Note: Not available for credit to students who have taken STAT A401.

Registration Restrictions: Graduate standing

May Be Stacked With: STAT A401

STAT A602 Advanced Scientific Sampling 3 Credits

Sampling methods including simple random, stratified, systematic and cluster sampling. Special emphasis on estimation procedures including ratio and regression methods and topics selected from: allocations, direct sampling, inverse sampling, randomized response sampling, Monte Carlo simulated variates, bootstrap, jackknife and cross validation. Students enrolled in this course will be expected to complete additional work at a higher level than those students enrolled in STAT A402 and complete a survey project.

Special Note: Not available for credit to students who have completed STAT A402.

Registration Restrictions: Graduate standing

May Be Stacked With: STAT A402

STAT A603 Advanced Regression Analysis 3 Credits

Simple and multiple regression, statistical inferences in regression, matrix formulation of regression, polynomial regression, ridge regression, nonlinear regression and normal correlation models. A major statistical package is used as a tool to aid calculations required for the many techniques. Students enrolled in this course will be expected to complete additional work at a higher level than those students enrolled in STAT A403 and complete a research project.

Special Note: Not available for credit to students who have completed STAT A403.

Registration Restrictions: Graduate standing

May Be Stacked With: STAT A403

STAT A604 Advanced Analysis of Variance 3 Credits

Single-factor models, factor effects, nonparametric tests, two-factor models, random and mixed effects models, multifactor studies, analysis of covariance, and selected experimental designs. A major statistical package is used as a tool to aid calculations required for many of the techniques. Students enrolled in this course will be expected to complete additional work at a higher level than those students enrolled in STAT A404 and complete a research project.

Special Note: Not available for credit to students who have completed STAT A404.

Registration Restrictions: Graduate standing

May Be Stacked With: STAT A404

STAT A607 Advanced Time Series Analysis 3 Credits

Decomposition of time series, seasonal adjustment methods and index numbers. Forecasting models including causal models, trend models and smoothing models. Autoregressive (AR) forecasting models, moving average (MA) forecasting models and integrated (ARIMA) forecasting models. A major statistical package is used as a tool to aid calculations required for many of the techniques. Students enrolled in this course will be expected to complete additional work at a higher level than those students enrolled in STAT A407 and complete a research project.

Special Note: Not available for credit to students who have completed STAT A407.

Registration Restrictions: Graduate standing

May Be Stacked With: STAT A407

STAT A608 Advanced Multivariate Statistics 3 Credits

Multivariate statistical methods including exploratory data analysis, geometrical interpretation of multivariate data, multivariate tests of hypotheses, multivariate analysis of variance, multivariate multiple regression, principal components, factor analysis, discriminant analysis, cluster analysis and multidimensional scaling. Students enrolled in this course will be expected to complete additional work at a higher level than those students enrolled in STAT A408 and complete a research project.

Special Note: Not available for credit to students who have completed STAT A408.

Registration Restrictions: Graduate standing

May Be Stacked With: STAT A408

Surgical Technology (SURG)

Courses

SURG A150 Introduction to Surgical Technology 4 Credits

Introduces the field of surgical technology. Covers the role of the surgical technologist, professionalism, ethics, and certification. Includes care concepts of the surgical patient, exploration of the physical environment and safety issues.

Registration Restrictions: Departmental approval

SURG A160 Fundamentals of Surgical Technology 8 Credits

Presents fundamentals of surgical technology. Covers the principles of asepsis and sterile technique, sterilization of instruments and equipment, identification of surgical instruments, preoperative preparation of the patient and equipment. Includes perioperative pharmacology, anesthesia concepts, intraoperative routines and postoperative care.

Registration Restrictions: Departmental approval

SURG A210 Surgical Procedures I 6 Credits

Presents surgical procedures in general surgery, obstetrics and gynecology, ophthalmic, otorlaryngology, oral maxillofacial, and plastic and reconstructive surgery, as well as diagnostic procedures performed in the operating room. Includes common procedures, surgical anatomy, common instrumentation, sutures used and medications used for each area of study. Provides laboratory experience for application of knowledge and development of skills.

Registration Restrictions: Departmental approval

SURG A220 Surgical Procedures II 6 Credits

Presents surgical procedures in genitourinary, orthopedic, cardiac, thoracic and pulmonary, peripheral vascular, neurosurgery, emergency trauma and pediatric surgery. Includes common procedures, surgical anatomy, common instrumentation, and sutures and medications used for each area of study. Provides laboratory experience for application of knowledge and development of skills.

Registration Restrictions: Departmental approval

SURG A292 Surgical Technology Seminar 1 Credit

Provides opportunity for evaluation and discussion of experiences in clinical practicum course. Covers professional practice issues in preparation for transition to workplace. Includes ethics, legal issues, patient confidentiality, documentation, and teamwork as applicable to the clinical practicum experience.

Registration Restrictions: Departmental approval

SURG A295 Surgical Technology Practicum 11 Credits

Provides an opportunity for students to apply theories, knowledge and skills in a supervised clinical setting as final preparation for employment in the field. Duties are assigned by UAA instructor in conjunction with clinical personnel in affiliated hospitals and surgery centers.

Registration Restrictions: Departmental approval

Technology (TECH)

Courses

TECH A101 Introduction to Technological Principles 3 Credits

Introduces basic physical properties commonly found in a technical field. Emphasizes data collection and test equipment procedures.

Prerequisites: MATH A105 or concurrent enrollment.

TECH A295 Technical Internship 1-6 Credits

Provides work experience, familiarization with technical operations and equipment and insight to management practices closely related with technology-rich career fields. Work for the internship is supervised by industry and faculty members.

Registration Restrictions: Instructor permission required.

TECH A302 Organizational Safety and Health 3 Credits

Covers issues, concerns and factors relating to environmental, safety and health issues that leaders and managers in technical fields are likely to encounter in their workplace. Examines common occupational safety and health (OSH) and Alaska OSH (AKOSH) standards for maintaining a safe and healthy workplace, recognizing safety issues, and taking action to mitigate and prevent safety issues. Includes steps for establishing a corporate culture of safety and health.

Prerequisites: (COMM A111 with a minimum grade of C or COMM A235 with a minimum grade of C or COMM A237 with a minimum grade of C or COMM A241 with a minimum grade of C) and (WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C) and TECH A305 with a minimum grade of C or concurrent enrollment.

TECH A305 Applied Leadership for Technicians 3 Credits

Serves as the bridge course in the Bachelor of Science in Applied Technologies Leadership program. Covers principles of career management. Develops leadership perspectives that prepare students to think and act strategically as technical leaders in their organization. Builds leadership capacity for driving business results to deliver customer value.

Prerequisites: (COMM A111 with a minimum grade of C or COMM A235 with a minimum grade of C or COMM A237 with a minimum grade of C or COMM A241 with a minimum grade of C) and (WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C or ENGL A214 with a minimum grade of C).

TECH A390 Selected Topics in Applied Technologies Management **1-4 Credits**

Offers selected topics in applied technologies leadership and management based on current trends, technologies, and student and employer needs.

Special Note: May be repeated for a maximum of 12 credits with a change of subtitle.

Registration Restrictions: Department approval required.

TECH A412 Field-Based Study **1-9 Credits**

Provides an opportunity for students to increase mastery in a specific technical discipline using means not otherwise accessible through traditional academic settings. Areas of field-based study may include industry certifications and participation in professional development classes or seminars offered by industry, proprietary schools or government agencies.

Special Note: Students must coordinate with the instructor of the course prior to the semester in which they intend to take the course to discuss their proposed study area.

Registration Restrictions: Faculty approval

Prerequisites: TECH A305 with a minimum grade of C or concurrent enrollment.

TECH A433 Project Design, Implementation and Control **3 Credits**

Provides the foundation for understanding the basic principles of project management methodologies, including how to manage, monitor and control success factors. Examines project management from a leadership and management standpoint. Includes understanding and meeting stakeholder expectations, communicating and working with teams, and solving problems.

Prerequisites: STAT A200 with a minimum grade of C and TECH A305 with a minimum grade of C.

TECH A443 Quality Leadership **3 Credits**

Supports the principles and practices of quality leadership. Demonstrates ways to achieve continuous improvement for a successful workplace environment. Emphasizes leadership skills applicable to technicians and managers as they work with customers, subordinates, peers, and supervisors.

Registration Restrictions: Junior standing.

Prerequisites: MATH A151 or MATH A155.

TECH A453 Capstone Project **3 Credits**

Integrates professional, communication and leadership skills with general education knowledge to complete a project related to opportunities, problems or issues in students' career fields or in the community. Requires a written report and oral presentation at the end of the semester.

Special Note: Students meet weekly with faculty advisor and other students in the BS in Applied Technologies Leadership program, but this is an independent study project which requires at least 175 hours of commitment.

Registration Restrictions: Junior standing and faculty approval required. Completion of GER Tier 1 (basic college-level skills) courses.

Prerequisites: TECH A302 with a minimum grade of C and TECH A305 with a minimum grade of C and TECH A433 with a minimum grade of C.

Attributes: UAA Integrative Capstone GER.

TECH A490 Selected Topics in Technology Management **1-3 Credits**

Provides customized development training in areas related to technology management. Course content is determined by specific industry needs.

Special Note: May be repeated with a change of topic for a maximum of 9 credits.

Registration Restrictions: Faculty approval required.

TECH A495 Technical Internship **1-3 Credits**

Supports supervisory and management practices used in business operations through a work experience internship.

Special Note: Requires at least 75 hours of work internship per credit hour plus additional instructor contact time.

Registration Restrictions: Faculty approval

Crosslisted With: VE A495

Theater (THR)

Courses

THR A111 Theatre Appreciation **3 Credits**

Survey of theatre with focus on artists who contribute to theatrical production viewed within the context of historical styles and development.

Attributes: UAA Fine Arts GER.

THR A121 Introduction to Acting **3 Credits**

An introduction to basic acting techniques with emphasis on creativity, concentration, relaxation, physical and vocal awareness, and the Stanislavsky system of acting.

THR A124 Dance for Musical Theatre I **2 Credits**

Introduces the vocabulary, variety of movement styles and performance techniques inherent in American musical theatre, including the ability to vocalize correctly during movement. Covers a range of time periods from the 1920s to the present.

Special Note: May be repeated for a maximum of 8 credits.

Crosslisted With: DNCE A124.

THR A131 Theatrical Production Techniques **3 Credits**

Introduction to the mechanics of stage production. Emphasizes safe and practical use of tools, equipment and materials employed in scene shop, lighting, backstage and costume work. Students master basic practices and techniques required for effective production work in each area.

THR A132 Introduction to Theatrical Design **3 Credits**

Introduces the basic elements of design and color theory combined with an overview of figure drawing, rendering techniques and script analysis.

THR A141 Stagecraft I **3 Credits**

Workshop in principles and techniques of contemporary theatrical production, including technical direction, drafting, scenery construction and rigging.

Special Note: This course includes lab time.

Prerequisites: THR A131 with a minimum grade of C.

THR A151 Makeup for the Theatre **3 Credits**

Basic principles of stage make-up techniques emphasizing the structure of the face, character interpretation, stage lighting, historical research for hair and makeup, and special 3-D effects.

THR A195 Theatre Practicum: Performance 1-3 Credits

Participation in mainstage productions as an actor, director, dancer, choreographer or assistant director.

Special Note: Can be repeated with a change of project for up to 9 credits.

Registration Restrictions: Faculty permission and audition.

May Be Stacked With: THR A395

THR A214 Historical Plays 3 Credits

Surveys various examples of play texts from antiquity to 1800, focusing on their historical context and production both in their own time and today.

Prerequisites: WRTG A111 with a minimum grade of C or WRTG A1W with a minimum grade of C.

Attributes: UAA Fine Arts GER.

THR A215 Contemporary Plays 3 Credits

Surveys various examples of play texts from 1800 to today, focusing on their historical context and production both in their own time and today.

Prerequisites: WRTG A111 with a minimum grade of C or WRTG A1W with a minimum grade of C.

Attributes: UAA Fine Arts GER.

THR A221 Movement for the Actor 3 Credits

Study of movement and its specific relationship to acting skills. Work includes analysis of nonverbal communication and developmental physical skills.

Prerequisites: THR A121.

THR A222 Voice for the Actor 3 Credits

Introduces the acting student to exercises designed to free and increase the expressive power of the voice, with the primary goal being emotional honesty.

Prerequisites: THR A121 with a minimum grade of C.

THR A224 Dance for Musical Theatre II 2 Credits

Continuation of Dance for Musical Theatre I, building on the foundation of vocabulary, movement styles, vocalizing, and performance techniques. Techniques in improving audition skills and perfecting performance ability. Encompasses a range of time periods, from the 1920s to the present.

Special Note: May be repeated three times for credit.

Crosslisted With: DNCE A224.

Prerequisites: DNCE A124 with a minimum grade of C or THR A124 with a minimum grade of C.

THR A243 Scene Design 3 Credits

Principles of design for the stage including drafting, rendering, theory, analysis and practice.

Special Note: This course includes lab time.

Prerequisites: THR A131 with a minimum grade of C and THR A132 with a minimum grade of C.

THR A257 Costume Design 3 Credits

Principles of costume design with emphasis on historic research and rendering techniques. Overall study of costume and fashion history and its relation to theatre productions and designs.

Prerequisites: THR A132 with a minimum grade of C.

THR A290 Selected Topics in Theatre 3 Credits

Current, introductory-level topics in theatre practice addressing special demands of the theatre season or special faculty expertise.

Special Note: May be repeated for a maximum of 9 credits with a change of subtitle.

Prerequisites: THR A121 with a minimum grade of C or THR A131 with a minimum grade of C or THR A132 with a minimum grade of C.

THR A295 Theatre Practicum: Technical 1-3 Credits

Participation in mainstage productions as member of technical staff. Credit for scene crew, light crew, props, costume crew, makeup crew, stage management, and publicity.

Special Note: May be repeated for a maximum of 9 credits.

May Be Stacked With: THR A495

THR A306 Stage Management 3 Credits

Explores the role and function of the stage manager in theatrical production. Provides the basic skills to work in the field of stage management. Emphasis on organization, documentation, and dissemination of information.

Prerequisites: THR A131.

THR A315 Playwriting 3 Credits

Focuses on analyzing and writing dramatic scripts for live performance. Course will feature public readings of student work.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses with a minimum grade of C

THR A322 Scene Study 3 Credits

Provides students with in-depth scene study in realism, naturalism and early modern performance styles. Students will utilize Stanislavski-based acting techniques to perform scenes from realistic and/or naturalistic scripts and will learn to adapt those techniques to perform scenes in plays by Shakespeare and other early modern playwrights.

Prerequisites: THR A221 with a minimum grade of C and THR A222 with a minimum grade of C.

THR A325 Theatre Speech and Dialects 3 Credits

Continuation of THR A222 starting with the production and energizing of vowels and consonants. Covers the International Phonetic Alphabet as well as a systematic approach for the acquisition of a foreign dialect based on tempo/rhythm, facial posture, pitch range, resonance focus, lift pattern, topography, history, and national character.

Prerequisites: THR A222 with a minimum grade of C.

THR A328 Acting Shakespeare 3 Credits

Intensive exploration of text-based analysis of Shakespearean characters. Emphasis on scene and character study in a studio setting.

Prerequisites: THR A221 with a minimum grade of C and THR A222 with a minimum grade of C.

THR A329 Combat for the Stage 3 Credits

An introduction to the art of fighting in the theatre including basic techniques from among the following combat disciplines: unarmed, quarterstaff, single rapier, rapier and dagger, or broadsword. Emphasis is placed on safety and acting the fight as well as the effectiveness illusion of violence.

Prerequisites: THR A121 with a minimum grade of C and THR A221 with a minimum grade of C.

THR A331 Directing I 3 Credits

Studies the history, theories and methods of stage direction. Culminates in the staging of a scene from a dramatic work.

Prerequisites: THR A121 with a minimum grade of C and THR A131 with a minimum grade of C and THR A132 with a minimum grade of C.

THR A341 Advanced Theatre Technologies 3 Credits

Advanced problems and techniques of technical theatre production. Course is keyed to recent developments in the technical production areas.

Prerequisites: THR A131 with a minimum grade of C and THR A132 with a minimum grade of C.

THR A343 Scenic Design II 3 Credits

Continuation and expansion of THR A243 reflecting most recent trends in theatre practice. Advanced course teaching more complex techniques. Emphasizes design theory and script analysis with concentration on various rendering and modeling methods.

Prerequisites: THR A243 with a minimum grade of C.

THR A345 Theatrical Properties: Design and Construction 3 Credits

Emphasizes the safety, construction and planning skills necessary to design and construct three-dimensional theatrical props, models and miniatures. Emphasis is on the collaborative skills of transforming images from a designer's sketches and concept art to working drawings and full three-dimensional theatrical props. Techniques include, but are not limited to, carving, molding, casting, painting, finishing and the acquisition of props.

Prerequisites: THR A131 with a minimum grade of C and THR A132 with a minimum grade of C.

THR A347 Lighting Design 3 Credits

Explores the theory and practice of the design and execution of lighting and associated electrical effects for the stage. Focuses on theatrical lighting with additional material on related fields.

Prerequisites: THR A131 with a minimum grade of C and THR A132 with a minimum grade of C.

THR A350 Costume Crafts 3 Credits

Introduces the creation of theatrical costume props. Craft artisans work with challenging materials and solve unique projects on a daily basis. Provides hands-on experience with millinery, mask-making, leather-working, jewelry-making, dying and more.

Special Note: May be taken twice for credit.

Prerequisites: THR A131 with a minimum grade of C.

THR A357 Costume Construction 3 Credits

Advanced work in costume construction, including developing essential sewing techniques, gaining basic knowledge of draping and pattern alteration, and completing of a finished theatrical garment.

Special Note: May be repeated once for credit. This course includes lab time.

Prerequisites: THR A131 with a minimum grade of C.

THR A376 CAD for the Arts 3 Credits

Concepts and techniques of 2D and 3D computer-aided drafting. Details language and commands shared by most CAD packages with a focus on technical drawings for layout, design and 3D computer drafting and modeling techniques, with applications to scenic, lighting, and 3D studio arts.

Crosslisted With: ART A376.

Prerequisites: ART A357 or THR A141.

THR A395 Advanced Practicum: Performance 1-3 Credits

Performance practicum for juniors and seniors: Advanced participation in mainstage productions as an actor, director, dancer, choreographer or assistant director.

Special Note: May be repeated with a change of project for up to 9 credits.

Registration Restrictions: Faculty permission and audition.

May Be Stacked With: THR A195

THR A411 History of Theatre to 1700 3 Credits

Studies theatre history from ancient Greece to 1700 including the history and the influence of different cultures, traditions and technology on the development of the theatre as a social institution.

Registration Restrictions: Junior or senior standing and the completion of GER Tier 1 Written Communication requirements

Attributes: UAA Humanities GER.

THR A412 History of Theatre Since 1700 3 Credits

Theatre history from 1700 to the present day.

Registration Restrictions: Junior or senior standing and the completion of GER Tier 1 Written Communication requirements

Attributes: UAA Humanities GER.

THR A435 Directing II 3 Credits

Advanced study of the history, theories and methods of stage direction. Culminates in the staging of a play.

Special Note: May be repeated once for credit.

THR A445 Advanced Theatre Production 3 Credits

Advanced technical theatre course with selected emphasis in scenery design, lighting, stagecraft, costume or directing.

Registration Restrictions: Theatre major and junior standing

Prerequisites: THR A131.

THR A450 Resume and Portfolio Workshop 1 Credit

Offers career preparation to work as theatre professionals. Portfolio preparation will follow the United States Institute for Theatre Technology's standards and standards employed by Actors' Equity Association, LORT theatres and U/RTA and ACTF for Stage Managers. Includes organization, resume, interview/audition procedures, personal marketing and presentation, dress and decorum, job applications, and networking.

Special Note: Recommended for the fall semester of the student's senior year.

Registration Restrictions: Senior standing

THR A490 Selected Topics in Performance 3 Credits

Current topics in theatrical performance addressing special demands of the theatre season or special faculty expertise.

Special Note: May be repeated for credit with change of subtitle.

Prerequisites: THR A121 with a minimum grade of C.

THR A491 Selected Topics in Technical Theatre 3 Credits

Current topics in technical theatre theory and practice. Includes studio work.

Special Note: May be repeated with change of subtitle for a maximum of 12 credits.

Prerequisites: THR A243 or THR A257.

THR A492 Senior Seminar 3 Credits

Intensive examination of a topic in Theatre or Dance including the historical, cultural, social and political influences on each aspect of the performance area: writing, acting, movement and design with an emphasis on its relevance to a contemporary audience.

Special Note: May be repeated once for credit with a change in subtitle.

Registration Restrictions: Completion of GER Tier 1 (basic college-level skills) courses and these GER Tier 2 disciplinary areas: Fine Arts, Humanities and Social Sciences. Junior or senior standing.

Attributes: UAA Integrative Capstone GER.

THR A495 Advanced Practicum: Technical 1-3 Credits

Technical practicum for juniors and seniors. Emphasis is on participation in a mainstage production as a significant member of the technical/production crew or design team.

Special Note: May be repeated with change of project for 9 credits.

Registration Restrictions: Permission of instructor

May Be Stacked With: THR A295

Prerequisites: THR A295.

THR A498 Individual Research 3 Credits

Independent research on a specific topic or area of theatre culminating in a research paper. Participation in professional conferences and competition strongly recommended.

Registration Restrictions: Junior standing in Theatre and department chair's signature.

THR A499 Senior Thesis 3 Credits

Independent or collaborative research project on a specific topic or area of theatre culminating in the presentation of a live theatre performance or design execution. Continuation and application of the research completed in THR A498 and required for the Theatre Honors Program. Participation in professional competitions strongly encouraged.

Registration Restrictions: Admission to the Theatre Honors program and department chair's signature.

Prerequisites: THR A498 with a minimum grade of B.

Undergrad Rsrch & Scholarship (URS)

Courses

URS A121 Methods of Inquiry 3 Credits

Introduces students to the ways that knowledge is both discovered and generated in multiple disciplines. Covers the tools and study of the different means, materials, methods, nature and ethics of academic inquiry. Teaches skills and techniques in critical thinking, empirical and quantitative analysis, qualitative analysis, investigation, problem solving, learning, and research appropriate to the acquisition of knowledge in varying fields of study.

Prerequisites: (WRTG A111 with a minimum grade of C or WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C) and (MATH A105 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C or MATH A155 with a minimum grade of C or MATH A251 with a minimum grade of C or MATH A252 with a minimum grade of C).

Attributes: UAA Social Sciences GER.

Veterinary Assisting (VETT)

Courses

VETT A101 Introduction to the Veterinary Profession 1 Credit

Introduction to the veterinary profession for individuals considering a career in this field. Introduces responsibilities and expectations as well as legal boundaries of a veterinary health care team.

VETT A103 Veterinary Office Procedures 3 Credits

Provides the student with current information in veterinary practice office management. Students will apply concepts, principles, and skills to situations specific to veterinary office procedures.

Prerequisites: VETT A101 or concurrent enrollment.

VETT A122 Basic Handling and Behavior: Small Animals 2 Credits

Introduces general topics in the veterinary field: small-animal breeds and behavior, safe animal handling and restraint, grooming, nutrition, and vaccination. Additional topics include exam room procedures (physical exam and history taking), facility maintenance, medicating, surgical assisting, and laboratory assisting.

Prerequisites: VETT A101 or concurrent enrollment.

VETT A123 Basic Handling and Behavior: Large Animals 2 Credits

Introductory course for students considering a career in large-animal health care. Introduces large-animal nutrition, care, behavior, and restraint, including working safely with large animals.

Prerequisites: VETT A101 or concurrent enrollment.

VETT A124 Introduction to Small Animals 3 Credits

Introductory course for students considering a career in small-animal health care. Topics include an introduction to restraint, clinical pathology, diagnostic imaging, emergency medicine, anesthesia, pharmacology and pain management, surgical and medical nursing, dentistry, and other applicable skills.

Prerequisites: VETT A101 or concurrent enrollment.

VETT A125 Introduction to Large Animals 3 Credits

Introductory course for students considering a career in large-animal health care. Introduces clinical patient management and procedures, laboratory procedures, anesthesia, pharmacology, and surgical and medical nursing specific to large animal species.

Prerequisites: VETT A101 or concurrent enrollment.

VETT A201 Veterinary Anatomy and Physiology 4 Credits

Introductory anatomy and physiology course for students considering a career or furthering their education in the veterinary field. Introduces comparative anatomy and physiologic processes for both small- and large-animal species. Includes lecture and lab components.

Registration Restrictions: Placement into WRTG A110 or higher and (high school chemistry with minimum grade of C and biology with minimum grade of C), or (CHEM A055 with minimum grade of C and BIOL A102 with minimum grade of C and BIOL A103 with minimum grade of C).

Prerequisites: VETT A101 or concurrent enrollment.

VETT A295 Veterinary Assistant Practicum 3 Credits

Students gain practical experience in a workplace setting. The faculty, practicum supervisor, and student collaboratively develop an individualized plan for workplace training to reflect the student's occupational objectives.

Special Note: Majors only.

Prerequisites: VETT A101 or concurrent enrollment.

Veterinary Technology (VTCH)

Courses

VTCH A101 Introduction to Veterinary Technology 1 Credit

Introduces the veterinary profession to individuals considering a career in the field. Introduces responsibilities and expectations as well as legal boundaries of a veterinary health care team. Emphasizes the application of professional ethics and laws in veterinary medicine and professional development. Orients students to Mat-Su College resources and tools for student success.

VTCH A102 Veterinary Medical Terminology 1 Credit

Introduces veterinary medical terminology for common clinically recognizable diseases, operations, systems, and procedures, as well as common medical abbreviations and colloquial vocabulary.

VTCH A110 Medical Calculations for Veterinary Technicians 1 Credit

Emphasizes mathematical fundamentals necessary for a veterinary technician to work as a successful member of a veterinary team. Reviews basic mathematical functions and applies them to medical calculations clinically important to veterinary technicians. Focuses on medical calculations: dosages, drip rates, concentrations, and other drug administration information.

Prerequisites: VTCH A101 with a minimum grade of C and VTCH A102 with a minimum grade of C.

VTCH A111 Veterinary Office Procedures and Hospital Management 3 Credits

Develops skills veterinary practices utilize in a modern veterinary facility. Instruction will include but is not limited to: developing good public, client and staff relations; front office procedures; client services and education; breed and species identification and considerations; and personal grooming and professional attire. Emphasizes professional development and application of ethics and law in veterinary medicine.

Prerequisites: VTCH A101 with a minimum grade of C and VTCH A102 with a minimum grade of C.

VTCH A112 Veterinary Anatomy and Physiology 3 Credits

Covers the fundamentals of domestic animal anatomy and physiology using a systems approach with a focus on anatomical structures of clinical importance to veterinary technicians.

Prerequisites: VTCH A101 with a minimum grade of C and VTCH A102 with a minimum grade of C.

Corequisites: VTCH A112L.

VTCH A112L Veterinary Anatomy and Physiology Laboratory 1 Credit

Applies a hands-on approach to learning the fundamentals of domestic animal anatomy and physiology by major organ system utilizing dissection specimens, models, experiments, and other laboratory tools and supplies as needed. Focuses on anatomical structures of clinical importance to veterinary technicians.

Prerequisites: VTCH A101 with a minimum grade of C and VTCH A102 with a minimum grade of C.

Corequisites: VTCH A112.

VTCH A113 Veterinary Nursing Skills 3 Credits

Introduces personal safety and techniques for handling and restraining dogs and cats. Discusses critical thinking and technical skills required to perform physical examination, resuscitation, medication of animals, collection of laboratory specimens, and application of bandages. Covers venipuncture and intravenous catheter placement.

Prerequisites: VTCH A101 with a minimum grade of C and VTCH A102 with a minimum grade of C.

Corequisites: VTCH A113L.

VTCH A113L Veterinary Nursing Skills Laboratory 1 Credit

Applies personal safety and techniques for handling and restraining dogs and cats. Emphasizes critical thinking and the technical skills of physical examination, resuscitation, medication of animals, collection of laboratory specimens, and application of bandages. Teaches venipuncture and intravenous catheter placement techniques.

Prerequisites: VTCH A101 with a minimum grade of C and VTCH A102 with a minimum grade of C.

Corequisites: VTCH A113.

VTCH A120 Pharmacology for Veterinary Technicians 2 Credits

Develops pharmaceutical skills and knowledge of common drugs and medications veterinary technicians use in the modern veterinary facility. Emphasizes classes of drugs, their use, potential side effects and contraindications, calculation of drug dosages, and administration and dispensation of drugs and medications. Discusses legal issues and record keeping.

Prerequisites: VTCH A110 with a minimum grade of C and VTCH A111 with a minimum grade of C and VTCH A112 with a minimum grade of C and VTCH A112L with a minimum grade of C and VTCH A113 with a minimum grade of C and VTCH A113L with a minimum grade of C.

VTCH A121 Small Animal Medicine 3 Credits

Introduces the topics of small animal health and disease for dogs and cats. Covers preventive medicine and specific disease processes commonly encountered in veterinary practice and clinically relevant to veterinary technicians. Addresses vaccination protocols and nutrition.

Prerequisites: VTCH A110 with a minimum grade of C and VTCH A111 with a minimum grade of C and VTCH A112 with a minimum grade of C and VTCH A112L with a minimum grade of C and VTCH A113 with a minimum grade of C and VTCH A113L with a minimum grade of C.

VTCH A122 Veterinary Surgical Nursing 3 Credits

Covers veterinary nursing fundamentals used in common surgical procedures. Includes procedural management and instrument identification, care and use. Emphasizes asepsis, surgical assistance and patient management.

Prerequisites: VTCH A110 with a minimum grade of C and VTCH A111 with a minimum grade of C and VTCH A112 with a minimum grade of C and VTCH A112L with a minimum grade of C and VTCH A113 with a minimum grade of C and VTCH A113L with a minimum grade of C.

Corequisites: VTCH A122L.

VTCH A122L Veterinary Surgical Nursing Laboratory 1 Credit

Applies veterinary nursing fundamentals used in common surgical procedures. Includes procedural management and instrument identification, care and use. Emphasizes asepsis, surgical assistance and patient management.

Prerequisites: VTCH A110 with a minimum grade of C and VTCH A111 with a minimum grade of C and VTCH A112 with a minimum grade of C and VTCH A112L with a minimum grade of C and VTCH A113 with a minimum grade of C and VTCH A113L with a minimum grade of C.

Corequisites: VTCH A122.

VTCH A130 Applied Small Animal Behavior I 1 Credit

Introduces natural history and developmental behavior of dogs and cats, principles of learning theory, and practical applications to behavior modification. Applies specific behavior modification techniques to developing written client education handouts.

Prerequisites: VTCH A195 with a minimum grade of C.

VTCH A195 Clinical Externship I 3 Credits

Provides guided learning experience in a veterinary clinical setting. Applies veterinary technology theory and skills acquired during the first year of VTCH courses.

Special Note: Requires 45 hours of work experience for each credit (135 approved hours).

Prerequisites: VTCH A120 with a minimum grade of C and VTCH A121 with a minimum grade of C and VTCH A122 with a minimum grade of C and VTCH A122L with a minimum grade of C and VTCH A223 with a minimum grade of C and VTCH A223L with a minimum grade of C.

VTCH A223 Veterinary Microbiology and Parasitology 3 Credits

Introduces clinical veterinary microbiology and parasitology, zoonotic diseases, and veterinary public health.

Prerequisites: VTCH A110 with a minimum grade of C and VTCH A111 with a minimum grade of C and VTCH A112 with a minimum grade of C and VTCH A112L with a minimum grade of C and VTCH A113 with a minimum grade of C and VTCH A113L with a minimum grade of C.

Corequisites: VTCH A223L.

VTCH A223L Veterinary Microbiology and Parasitology Laboratory 1 Credit

Applies the fundamentals of specimen collecting, handling and testing in clinical veterinary microbiology and parasitology, zoonotic diseases, and veterinary public health.

Prerequisites: VTCH A110 with a minimum grade of C and VTCH A111 with a minimum grade of C and VTCH A112 with a minimum grade of C and VTCH A112L with a minimum grade of C and VTCH A113 with a minimum grade of C and VTCH A113L with a minimum grade of C.

Corequisites: VTCH A223.

VTCH A231 Veterinary Diagnostic Imaging and Dentistry 2 Credits

Introduces theory and principles of diagnostic imaging and dentistry techniques used in veterinary medicine. Covers safe procedures for producing quality radiographs. Examines dentistry evaluation, diagnostics and prophylaxis in small animals.

Prerequisites: VTCH A195 with a minimum grade of C.

Corequisites: VTCH A231L.

VTCH A231L Veterinary Diagnostic Imaging and Dentistry Laboratory 1 Credit

Applies theories and principles of diagnostic imaging and dentistry techniques used in veterinary medicine. Emphasizes safe procedures for producing quality radiographs. Employs learned dentistry techniques for performing dental evaluations, diagnostics and prophylaxes in small animals.

Prerequisites: VTCH A195 with a minimum grade of C.

Corequisites: VTCH A231.

VTCH A232 Veterinary Anesthesia and Analgesia 3 Credits

Provides in-depth examination of veterinary anesthesia techniques, including identification and use of anesthetic-related drugs and equipment. Covers performing pre-anesthesia evaluations, administering and monitoring anesthesia, providing post-anesthesia care, recognizing and responding to anesthetic emergencies, evaluating patients, and implementing pain management protocols.

Prerequisites: VTCH A195 with a minimum grade of C.

Corequisites: VTCH A232L.

VTCH A232L Veterinary Anesthesia and Analgesia Laboratory 1 Credit

Applies veterinary anesthesia techniques, including identification and use of anesthetic-related drugs and equipment, for performing pre-anesthesia evaluations, administering and monitoring anesthesia, providing post-anesthesia care, recognizing and responding to anesthetic emergencies, evaluating patients, and implementing pain management protocols.

Prerequisites: VTCH A195 with a minimum grade of C.

Corequisites: VTCH A232.

VTCH A233 Veterinary Clinical Pathology 3 Credits

Covers veterinary hematology, cytology, blood chemistry, serology and urinalysis. Describes in-depth procedures for performing diagnostic tests and collecting, handling, and evaluating specimens.

Prerequisites: VTCH A195 with a minimum grade of C.

Corequisites: VTCH A233L.

VTCH A233L Veterinary Clinical Pathology Laboratory 1 Credit

Applies information covering veterinary hematology, cytology, blood chemistry, serology and urinalysis. Prepares students to perform diagnostic tests and collect, handle and evaluate specimens.

Prerequisites: VTCH A195 with a minimum grade of C.

Corequisites: VTCH A233.

VTCH A240 Applied Small Animal Behavior II 1 Credit

Expands on principles of learning theory and behavior modification techniques. Describes inappropriate elimination, disruptive behavior, separation anxiety, fear, and aggression in dogs and cats and situational and behavioral modifications used for addressing those problems. Discusses pharmacotherapy as an adjunct for behavior modification.

Prerequisites: VTCH A130 with a minimum grade of C and VTCH A231 with a minimum grade of C and VTCH A231L with a minimum grade of C and VTCH A232 with a minimum grade of C and VTCH A232L with a minimum grade of C and VTCH A233 with a minimum grade of C and VTCH A233L with a minimum grade of C.

VTCH A241 Laboratory and Exotic Animal Medicine 2 Credits

Discusses common laboratory and exotic animal species and their unique husbandry issues, handling and restraining, gender determination, reproduction, nutrition, common diseases, and clinical and surgical procedures.

Prerequisites: VTCH A130 with a minimum grade of C and VTCH A231 with a minimum grade of C and VTCH A231L with a minimum grade of C and VTCH A232 with a minimum grade of C and VTCH A232L with a minimum grade of C and VTCH A233 with a minimum grade of C and VTCH A233L with a minimum grade of C.

Corequisites: VTCH A241L.

VTCH A241L Laboratory and Exotic Animal Medicine Laboratory 1 Credit

Applies techniques for the care and handling, restraining, feeding, gender determination, and performance of clinical and surgical procedures of common laboratory and exotic animals.

Prerequisites: VTCH A130 with a minimum grade of C and VTCH A231 with a minimum grade of C and VTCH A231L with a minimum grade of C and VTCH A232 with a minimum grade of C and VTCH A232L with a minimum grade of C and VTCH A233 with a minimum grade of C and VTCH A233L with a minimum grade of C.

Corequisites: VTCH A241.

VTCH A242 Large Animal Medicine and Clinical Procedures 2 Credits

Discusses common large animal species and their unique husbandry issues, handling and restraining, reproduction, nutrition, common diseases, and clinical and surgical procedures.

Prerequisites: VTCH A130 with a minimum grade of C and VTCH A231 with a minimum grade of C and VTCH A231L with a minimum grade of C and VTCH A232 with a minimum grade of C and VTCH A232L with a minimum grade of C and VTCH A233 with a minimum grade of C and VTCH A233L with a minimum grade of C.

Corequisites: VTCH A242L.

VTCH A242L Large Animal Medicine and Clinical Procedures Laboratory 1 Credit

Applies techniques for care, reproductive management, disease prevention, handling, restraining, feeding, and performing clinical and surgical procedures for common large animals.

Prerequisites: VTCH A130 with a minimum grade of C and VTCH A231 with a minimum grade of C and VTCH A231L with a minimum grade of C and VTCH A232 with a minimum grade of C and VTCH A232L with a minimum grade of C and VTCH A233 with a minimum grade of C and VTCH A233L with a minimum grade of C.

Corequisites: VTCH A242.

VTCH A243 Career Success for Veterinary Technicians 1 Credit

Emphasizes professionalism, critical thinking tools, interpersonal skills and professional ethics for success as a veterinary technician. Teaches resume writing and job interviewing techniques. Explores career options, professional development opportunities, and current and projected trends in veterinary technology.

Prerequisites: VTCH A130 with a minimum grade of C and VTCH A231 with a minimum grade of C and VTCH A231L with a minimum grade of C and VTCH A232 with a minimum grade of C and VTCH A232L with a minimum grade of C and VTCH A233 with a minimum grade of C and VTCH A233L with a minimum grade of C.

VTCH A244 Veterinary Technician National Exam Preparation 1 Credit

Describes and applies study strategies and test-taking skills for successfully completing the Veterinary Technician National Exam (VTNE). Reviews all VTCH curricula content and related practice tests.

Prerequisites: VTCH A130 with a minimum grade of C and VTCH A231 with a minimum grade of C and VTCH A231L with a minimum grade of C and VTCH A232 with a minimum grade of C and VTCH A232L with a minimum grade of C and VTCH A233 with a minimum grade of C and VTCH A233L with a minimum grade of C.

VTCH A295 Clinical Externship II 3 Credits

Combines veterinary clinical skills with theoretical knowledge to complete student preparation for licensure and employment opportunities after graduation.

Special Note: Requires 45 hours of work experience for each credit (135 approved hours).

Prerequisites: VTCH A130 with a minimum grade of C and VTCH A231 with a minimum grade of C and VTCH A231L with a minimum grade of C and VTCH A232 with a minimum grade of C and VTCH A232L with a minimum grade of C and VTCH A233 with a minimum grade of C and VTCH A233L with a minimum grade of C.

Vocational Education (VE)

Courses

VE A412 Advanced Technical Experiences: Discipline Area 1-9 Credits

Supports a student's opportunity to participate in outside professional development to increase mastery in a specific technical discipline. This may include participation in classes offered by industry, proprietary schools, or other agencies. Each will be evaluated on an individual basis and must support the student's professional objectives.

Registration Restrictions: Faculty approval

VE A495 Technical Internship 1-3 Credits

Supports supervisory and management practices used in business operations through a work experience internship.

Special Note: Requires at least 75 hours of work internship per credit hour plus additional instructor contact time.

Registration Restrictions: Faculty approval

Crosslisted With: TECH A495

Welding Technology (WELD)

Courses

WELD A101 Gas and Arc Welding 3 Credits

Introduces basic principles of welding and thermal cutting. Covers oxyacetylene welding (OAW), brazing, and silver soldering. This course is divided between OAW, gas metal arc welding (GMAW), and shielded metal arc welding (SMAW) processes.

WELD A102 Gas Welding 2 Credits

Develops basic oxy-acetylene welding, brazing, and cast iron welding skills, emphasizing hands-on class assignments.

May Be Stacked With: WELD A103 and WELD A104

WELD A103 Arc Welding 4 Credits

Provides training and hands-on experience required for structural steel plate welding certification. Students certify on 0.375 inch plate, open root or with backing, at ASME or AWS code standards.

May Be Stacked With: WELD A102 and WELD A104

WELD A104 Arc Welding: Low-Hydrogen Electrodes 4 Credits

Develops skills and techniques required for low-hydrogen electrode welder certification, emphasizing hands-on experience. Students certify on 0.375 inch plate with backing, to AWS code standards.

Registration Restrictions: Arc welding experience can substitute for prerequisites.

May Be Stacked With: WELD A102 and WELD A103

Prerequisites: WELD A101 or WELD A103.

WELD A105 Pipe Welding 4 Credits

Develops skills and techniques for pipe welding, all positions, open root, uphill and downhill using ANSI Schedule 40 steel pipe sizes of 4-6 inch.

Registration Restrictions: Current certification of plate, open root, vertically upward, or pre-test during registration.

May Be Stacked With: WELD A106

Prerequisites: WELD A103 and WELD A104.

WELD A106 Pipe Certification 4 Credits

Develops skills required for pipe welding, all positions, open root, uphill and downhill using 6 inch Schedule 80 steel pipe, and certify on 6 inch Schedule 80 uphill procedure, ANSI B31 3 code standard.

May Be Stacked With: WELD A105

Prerequisites: WELD A105.

WELD A108 Wire Welding 4 Credits

Develops skills and techniques in wire-feed (MIG) welding on mild steel, stainless steel and aluminum, with and without gas shielding. Students gain hands-on experience with all wire types on the current market.

WELD A109 TIG Welding 4 Credits

Develops skills and techniques for tungsten-inert gas (TIG) welding on aluminum, zinc alloys, copper, magnesium, mild steel and stainless steel. Emphasizes hands-on welding assignments.

Prerequisites: WELD A101 or WELD A102.

WELD A112 Shielded Metal Arc Welding (SMAW) 3 Credits

Introduces the welding of mild steels with covered electrodes. Includes welding safety, electric arc welding equipment, electrode identification and selection, basic joint design, and welding practices on carbon steel plate.

WELD A114 Welding of High Strength Steels 3 Credits

Builds on knowledge and techniques covered in WELD A112.

Introduces the welding of high strength steels with covered electrodes. Includes welding safety, low alloy electrode selection, welding joint design, and alloy steel specifications.

Prerequisites: WELD A112 with a minimum grade of C.

WELD A117 Pipe Fabrication 4 Credits

Presents theory and practice for the layout and assembly of piping offsets and pipe spool assemblies common to the oil and gas industry.

Prerequisites: (MATH A105 with a minimum grade of C or MATH A115 with a minimum grade of C or MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C or MATH A155 with a minimum grade of C or MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C or MATH A252 with a minimum grade of C or MATH A253 with a minimum grade of C) and WELD A112 with a minimum grade of C.

WELD A121 Pipe Welding Vertical-Down SMAW 4 Credits

Builds on knowledge and techniques covered in WELD A112. Introduces vertical-down shielded metal arc welding (SMAW) techniques on carbon steel pipe using EXX 10 electrodes. Includes information on pipe material specifications, pipe fittings and assembly, welder qualification and American Petroleum Institute (API) Standard 1104 requirements.

May Be Stacked With: WELD A122

Prerequisites: WELD A112 with a minimum grade of C and WELD A114 with a minimum grade of C.

WELD A122 Pipe Welding Vertical-Up SMAW 4 Credits

Builds on knowledge and techniques covered in WELD A121. Introduces vertical-up shielded metal arc welding (SMAW) on carbon and alloy steel pipe using EXX 10 and EXX18 electrodes. Includes information on high-strength alloy pipe specifications and weld/welder evaluation/qualifications defined in ASME IX and ANSI/ASME B31.3.

Registration Restrictions: Instructor approval

May Be Stacked With: WELD A121

Prerequisites: WELD A121 with a minimum grade of C.

WELD A157 Technical Drawings for Welders 3 Credits

Provides instruction on proper reading and interpretation of industrial blueprints commonly used in the construction and petroleum industries. Covers terminology, welding symbols, processes and their applications, including alphabet of lines, orthographic and isometric drawings, piping, standard and ISO measuring devices and dimensioning, scaling, structural materials, industry standards, and computer-aided drafting principles.

Prerequisites: MATH A055 with a minimum grade of C or MATH A105 with a minimum grade of C or MATH A115 with a minimum grade of C or MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C or MATH A155 with a minimum grade of C or MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C or MATH A252 with a minimum grade of C or MATH A253 with a minimum grade of C.

WELD A161 Gas Metal Arc Welding (GMAW) 3 Credits

Introduces gas metal arc welding (GMAW) techniques for joining a number of metals. Includes information on power supplies, wire feed equipment, shielding gases, filler metal selection, and electrical characteristics of the arc.

WELD A162 Flux Cored Arc Welding (FCAW) 3 Credits

Builds on knowledge and techniques covered in WELD A112 or WELD A161. Introduces theory and practice of FCAW using self-shielded and dual-shielded wire processes. Covers physics of metal transfer, electrical characteristics of power supplies, wire feeders, and filler metal selection and storage.

Prerequisites: WELD A112 with a minimum grade of C or WELD A161 with a minimum grade of C.

WELD A174 Gas Tungsten Arc Welding (GTAW) 3 Credits

Builds on knowledge and techniques covered in WELD A112. Introduces gas tungsten arc welding (GTAW) techniques for joining a number of metals. Includes information on power supplies, torches, inert gases, filler metal selection and electrical characteristics of the arc.

Prerequisites: WELD A112 with a minimum grade of C or WELD A161 with a minimum grade of C.

WELD A190 Selected Topics in Welding Technology 1-4 Credits

Presents relevant topics and techniques in the field of welding and fabrication.

Special Note: May be repeated for credit with change of subtitle.

Prerequisites: WELD A101.

WELD A207 Industrial Welding Qualification 2 Credits

Provides opportunity for experienced welding students to study, practice and demonstrate mastery of one or more specific technical welding methods leading to national industrial welding qualification. Each student will be evaluated on an individual basis derived from the student's professional objectives.

Registration Restrictions: Prequalification welding test.

WELD A261 Ultrasonic Testing 4 Credits

Covers the principles of ultrasonic testing (UT) methods with compression and shear wave techniques. Examines inspection techniques in accordance with American Welding Society (AWS) D1.1, API 1104 and American Society of Mechanical Engineers (ASME) codes. Prepares students for the American Society for Nondestructive Testing (ASNT) SNT-TC-1A code recommended Level I and Level II UT general, specific, and practical examinations.

Prerequisites: MATH A105 with a minimum grade of C and WELD A262 with a minimum grade of C.

WELD A262 General Nondestructive Testing 3 Credits

Presents nondestructive testing methods of dye penetrant, magnetic particle, and visual testing. Includes the applications, advantages, and limitations of these NDT methods. Prepares students for the American Society for Nondestructive Testing (ASNT) SNT-TC-1A code Level I and Level II examinations in liquid penetrant testing (PT) and magnetic particle testing (MT).

Prerequisites: MATH A105 with a minimum grade of C.

WELD A263 Radiographic Testing Safety 2 Credits

Presents the safety practices and USNRC regulations for industrial radiography in nondestructive examination. Prepares for both Radioactive Materials (RAM) and the X-ray category Industrial Radiography Radiation Safety Personnel (IRRSP) examination administered by the American Society for Nondestructive Testing (ASNT).

Prerequisites: MATH A105 with a minimum grade of C and WELD A112 with a minimum grade of C.

WELD A264 Radiographic Testing 4 Credits

Presents theory and application of industrial radiography and meets the American Society for Nondestructive Testing (ASNT) initial training hour requirements for Level I and Level II radiographer. Includes operation of equipment, film exposures and development, radiographic procedure specifications, interpretation of radiographs, and a brief review of radiation safety.

Prerequisites: MATH A105 with a minimum grade of C and WELD A112 with a minimum grade of C and WELD A263 with a minimum grade of C or concurrent enrollment.

WELD A281 Welding Inspection and Code Review **3 Credits**

Presents various welding inspection methods and a study of applicable welding codes and standards in preparation for the American Welding Society (AWS) Certified Welding Inspector (CWI) Examination.

Prerequisites: MATH A105 with a minimum grade of C and WELD A112 with a minimum grade of C and WELD A157 with a minimum grade of C.

WELD A287 Welding Metallurgy Applications **5 Credits**

Presents technical information in welding metallurgy. Includes laboratory practice in metallography, heat-treating, and mechanical properties testing of various metals.

Prerequisites: MATH A105 with a minimum grade of C and WELD A112 with a minimum grade of C.

WELD A295 Welding & Nondestructive Testing Internship **1-3 Credits**

Provides experience in selected industry settings for students nearing completion of a program in the Welding & Nondestructive Testing Technology Department at UAA.

Special Note: Course may be repeated for a maximum of 3 credits. Students required to provide all personal protective equipment (PPE) and related workplace supplies required by the employer for the position. No more than one credit per two-week period will be awarded.

Registration Restrictions: A minimum of 12 credits completed of advisor-approved Welding & Nondestructive Testing Technology courses with a minimum GPA of 2.5 or higher. Enrollment is restricted to admitted majors in the Welding & Nondestructive Testing Technology program. Instructor approval required.

Writing (WRTG)

Courses

WRTG A080 Basic Writing & Reading **3-4 Credits**

Introduces college writing and reading skills. Develops sentences, paragraphs and short essays. Introduces strategies for effective revision. Enhances reading comprehension and vocabulary for academic reading.

Registration Restrictions: Appropriate score on placement test or departmental approval.

WRTG A090 Writing & Reading Strategies **3-4 Credits**

Develops college writing and reading strategies. Reviews sentence and paragraph structure as part of the development of essays. Emphasizes revision techniques for essays and critical reading in academic texts.

Registration Restrictions: If prerequisite is not satisfied, appropriate score on placement test or departmental approval is required.

Prerequisites: WRTG A080 with a minimum grade of C or (Accuplacer-Reading Comp with a score of 050 and Accuplacer-Sentence Skills with a score of 060) or Accuplacer-Sum AASS + AARC with a score of 110 or (Accuplacer NG Writing with a score of 235 and Accuplacer NG Reading with a score of 235).

WRTG A092 English Skills Lab **1-2 Credits**

Provides individualized and/or group instruction to improve basic reading and writing skills for academic purposes. Focuses on skill development to increase vocabulary and to improve reading comprehension & fluency, grammar, punctuation, and word choice. Includes guided practice in reading strategies and incorporates writing strategies for revising, editing, and proofreading.

Registration Restrictions: Appropriate score on English placement test or departmental approval.

WRTG A110 Introduction to College Writing **3 Credits**

Prepares students for WRTG A111. Emphasizes composition of essays for academic writing. Includes critical reading, analysis and integration of sources to enhance students' writing. Practices revising and editing to improve clarity, coherence and purpose.

Registration Restrictions: If prerequisite is not satisfied, appropriate score on placement test or departmental approval is required.

Prerequisites: WRTG A090 with a minimum grade of C or (Accuplacer-Reading Comp with a score of 065 and Accuplacer-Sentence Skills with a score of 075) or Accuplacer-Sum AASS + AARC with a score of 140 or (Accuplacer NG Writing with a score of 250 and Accuplacer NG Reading with a score of 250) or ACT English with a score of 18 or Enhanced ACT English with a score of 18 or SAT Critical Reading Score with a score of 450 or SAT Verbal Score with a score of 450.

WRTG A111 Writing Across Contexts **3 Credits**

An introduction to writing strategies and processes for reading and responding to rhetorical situations across a variety of public and academic contexts.

Prerequisites: ENGL A109 with a minimum grade of C or WRTG A110 with a minimum grade of C or (Accuplacer-Reading Comp with a score of 080 and Accuplacer-Sentence Skills with a score of 090) or Accuplacer-Sum AASS + AARC with a score of 170 or (Accuplacer NG Writing with a score of 265 and Accuplacer NG Reading with a score of 265) or ACT English with a score of 22 or Enhanced ACT English with a score of 22 or SAT Critical Reading Score with a score of 560 or SAT Verbal Score with a score of 560.

Attributes: UAA Written Communication GER.

WRTG A211 Writing and the Humanities **3 Credits**

Introduces what writing is and does and how people learn to do it in the humanities, with a focus on the disciplinary questions, methods and reasoning that shape the genres and writing practices in the field.

Prerequisites: WRTG A111 with a minimum grade of C or WRTG A1W with a minimum grade of C or WRTG A2W with a minimum grade of C or WRTG A3W with a minimum grade of C or SAT Critical Reading Score with a score of 610 or SAT Verbal Score with a score of 610 or Enhanced ACT English with a score of 30 or Original ACT English with a score of 30.

Attributes: UAA Written Communication GER.

WRTG A212 Writing and the Professions 3 Credits

An introduction to what writing is and does and how people learn to do it in the professions, with a focus on the disciplinary questions, methods and reasoning that shape the genres and writing practices in the field.

Registration Restrictions: If prerequisite is not satisfied, appropriate SAT, ACT or AP scores or approved UAA placement test is required.

Prerequisites: WRTG A111 with a minimum grade of C or WRTG A1W with a minimum grade of C or WRTG A2W with a minimum grade of C or WRTG A3W with a minimum grade of C or SAT Critical Reading Score with a score of 610 or SAT Verbal Score with a score of 610 or Enhanced ACT English with a score of 30 or Original ACT English with a score of 30.

Attributes: UAA Written Communication GER.

WRTG A213 Writing and the Sciences 3 Credits

An introduction to what writing is and does and how people learn to do it in the sciences, with a focus on the disciplinary questions, methods and reasoning that shape the genres and writing practices in the field.

Prerequisites: WRTG A111 with a minimum grade of C or WRTG A1W with a minimum grade of C or WRTG A2W with a minimum grade of C or WRTG A3W with a minimum grade of C or SAT Critical Reading Score with a score of 610 or SAT Verbal Score with a score of 610 or Enhanced ACT English with a score of 30 or Original ACT English with a score of 30.

Attributes: UAA Written Communication GER.

WRTG A214 Arguing Across Contexts 3 Credits

Instruction and practice in written research-supported arguments for a variety of audiences, with an emphasis on rhetorical strategies across a variety of public and academic contexts.

Prerequisites: WRTG A111 with a minimum grade of C or WRTG A1W with a minimum grade of C or WRTG A2W with a minimum grade of C or WRTG A3W with a minimum grade of C or SAT Critical Reading Score with a score of 610 or SAT Verbal Score with a score of 610 or Enhanced ACT English with a score of 30 or Original ACT English with a score of 30.

Attributes: UAA Written Communication GER.

Women's Studies (WS)

Courses

WS A200 Introduction to Women's and Gender Studies 3 Credits

Introduces students to the fundamental concepts and themes in the interdisciplinary study of women and gender. Course focuses on understanding institutions, social and political practices, and cultural representations that shape women's lives in both the developed and developing worlds as well as examining the role that gender plays in society.

Attributes: UAA Social Sciences GER.

WS A252 Women and Social Action 3 Credits

Examines the evolving role of women in contemporary organizations and social movements with an emphasis on leadership.

Crosslisted With: SOC A252

Prerequisites: SOC A101 with a minimum grade of C or WS A200 with a minimum grade of C.

WS A355 Women in Politics 3 Credits

Examines the roles of women in the political world from local, state, national and international perspectives. The nature of women's political roles will be studied from both historical and contemporary perspectives.

Crosslisted With: PS A355

Prerequisites: PS A101 or PS A102 or WS A200.

WS A400 Feminist Theory 3 Credits

Interdisciplinary examination of historical and contemporary feminist and gender theories.

Prerequisites: WS A200.

WS A401 Seminar in Women's Studies 3 Credits

Discusses issues related to women's studies. Content varies every semester.

Special Note: WS A401 may be repeated once for credit with a change of subtitle.

Prerequisites: WS A200.

WS A495 Internship in Women's Studies 3 Credits

An opportunity for students to apply the subject matter of women's studies to the practical life of the community.

Special Note: Internships vary; may be repeated once for credit with a different internship.

Prerequisites: WS A200.

Faculty

A (p. 678) | B (p. 678) | C (p. 681) | D (p. 682) | E (p. 683) | F (p. 684) | G (p. 685) | H (p. 685) | I (p. 688) | J (p. 688) | K (p. 689) | L (p. 690) | M (p. 691) | N (p. 693) | O (p. 694) | P (p. 694) | Q (p. 695) | R (p. 695) | S (p. 696) | T (p. 699) | V (p. 699) | W (p. 700) | Y (p. 701) | Z (p. 701)

A

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University of Wisconsin, Madison, B.S. (1994); University of Maryland, College Park, M.A. (1997), Ph.D. (1999).

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Ross, Larry L. Professor, Economics, College of Business and Public Policy.

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Ithaca College, B.A. (1968); State University of New York, New Paltz, M.A. (1974); Alaska Pacific University, M.B.A. (1991).

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Lansing Community College, A.A. (1987); Oakland University, B.A. (1991); University of Akron, M.A. (2004); Michigan Technological University, Ph.D. (2010).

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S

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North Carolina State University, B.S. (2012); College of William & Mary, M.S. (2014), Ph.D. (anticipated 2018).

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Shelby, Nancy Jane. Director, WWAMI School of Medical Education. Professor, Medical Education, College of Health. *University of Utah, B.S. (1988), M.S. (1991), Ph.D. (1993).*

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Shiryayev, Oleg V. Assistant Professor, Mechanical Engineering, College of Engineering. *Wright State University, B.Sc. (2002), M.Sc. (2003), Ph.D. (2008).*

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Sikorski, Janelle. Term Instructor, Geology, College of Arts and Sciences. *University of Cincinnati, B.S. (2002); Northern Arizona University, M.S. (2004).*

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University of Alaska, Fairbanks, B.A. (1986); University of Alaska Fairbanks, M.F.A. (1995).

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University of Massachusetts Dartmouth, B.S. (2010), M.S. (2012); University of Rhode Island, Ph.D. (2015).

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Smith, Kelly J. Assistant Professor, Automotive Technology, Community and Technical College.
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Portland State University, B.A. (1997); University of Alaska Anchorage, M.Ed. (2002).

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University of Washington, Seattle, B.A. (1978), B.M. (1978); Juilliard, M.M. (1980); University of New York Stony Brook, D.M.A. (1985).

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University of Arizona, School of Speech Language and Hearing Sciences, M.S. (2015).

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CECRI, Karaikudi India, B.Tech. (2002); University of Hawaii at Manoa, M.S. (2005), Ph.D. (2010).

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Trinity University, B.A. (1977); University of Texas at Arlington, M.S. (1980).

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Z

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Xi'An Foreign Languages University, China, B.A. (1982); University of Reading, United Kingdom, M.A. (1998); Brigham Young University, Ph.D. (2005).

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Nankai University, B.A. (2004), M.A. (2006); Washington State University, M.S. (2010); Washington State University, Ph.D. (2010).

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Tampere, University of Technology, Finland, B.S. (1985), M.S. (1985); Oregon State University, Corvallis, Ph.D. (1993).

Administration

Chancellor's Organizational Chart (<https://www.uaa.alaska.edu/about/administration/office-of-the-chancellor/organization/org-chart.cshtml>)

Samuel Gingerich, I (<https://www.uaa.alaska.edu/chancellor>)
Interim Chancellor (<https://www.uaa.alaska.edu/about/administration/office-of-the-chancellor>)

Monique Marron, Coordinator, Governance, Faculty Senate, Staff Council, Assembly (<https://www.uaa.alaska.edu/governance>)

Sara Childress, Director, Equity & Compliance, Title IX Coordinator (<https://www.uaa.alaska.edu/equity-and-compliance>)

Duane Hrnecir, Interim Provost, Academic Affairs (<http://www.uaa.alaska.edu/academicaffairs>)

Renée Carter-Chapman, Senior Vice Provost, Institutional Effectiveness (<http://www.uaa.alaska.edu/institutionaleffectiveness>)

Herb Schroeder, Vice Provost, A (<http://www.uaa.alaska.edu/ir>)
NSEP (<http://www.ansep.net>)

Helena Wisniewski, Vice Provost, R (<http://www.uaa.alaska.edu/institutionaleffectiveness>)
Research (<https://www.uaa.alaska.edu/research>)
and Graduate Studies (<https://www.uaa.alaska.edu/academics/graduate-school>)

Claudia Lampman, Interim Vice Provost, Student Success (<https://www.uaa.alaska.edu/academics/office-of-academic-affairs/interimvpforstudentsuccess.cshtml>)

Christina Bell, Associate Vice Provost & Executive Director, UAA Business Enterprise Institute (<http://www.uaa.alaska.edu/business-enterprise-institute>)

Erin Holmes, Associate Vice Provost, Institutional Research (<http://www.uaa.alaska.edu/ir>)

Jeane Breinig, Interim Associate Vice Chancellor, Alaska Natives (<https://www.uaa.alaska.edu/alaska-natives>) and Diversity (<https://www.uaa.alaska.edu/diversity>)

Megan Olson, Vice Chancellor, University Advancement (<https://www.uaa.alaska.edu/about/university-advancement>)

David Webb, Director, Marketing and Communications (<https://www.uaa.alaska.edu/about/university-advancement/university-relations>)

Vacant, Director, Alumni Engagement (<https://www.uaa.alaska.edu/about/university-advancement/alumni-relations>)

Vacant, Director, Philanthropy (<https://www.uaa.alaska.edu/about/university-advancement/office-of-development>)

Bruce Schultz, Vice Chancellor, Student Affairs (<http://www.uaa.alaska.edu/studentaffairs>)

Benjamin Morton, Dean of Students (<http://www.uaa.alaska.edu/deanofstudents>)

Lora Volden, Associate Vice Chancellor, Enrollment Services (<https://www.uaa.alaska.edu/about/student-affairs>)

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Beverly Cotton Shuford, Vice Chancellor, Administrative Services (<http://www.uaa.alaska.edu/adminsucs>)

Sandi Culver, Associate Vice Chancellor, Administrative Services (<http://www.uaa.alaska.edu/budfin>)

Tim McDiffett, Interim Director, Athletics (<http://www.uaa.alaska.edu/athletics>)

Ron Kamahele, Director, Human Resource Services (<http://www.uaa.alaska.edu/humanresources>)

Brad Munn, Chief of Police, University Police Department (<http://www.uaa.alaska.edu/upd>)

Adam Paulick, Associate Vice Chancellor & Chief Information Officer, Information Technology Services (<http://www.uaa.alaska.edu/informationtechnologyservices>)

Kelly Thorngren, Director, Budget (<http://www.uaa.alaska.edu/budfin/budget>)

Kim Mahoney, Interim Associate Vice Chancellor, Facilities & Campus Services (<http://www.uaa.alaska.edu/fcs>)

Academic Deans

Jeffrey Jessee, Dean, College of Health (<http://www.uaa.alaska.edu/collegeofhealth>)

Karen Markel, Dean, College of Business and Public Policy (<http://www.uaa.alaska.edu/cbpp>)

Fred Barlow, Dean, College of Engineering (<http://www.uaa.alaska.edu/collegeofengineering>)

Stephen Rollins, Dean, Consortium Library (<http://consortiumlibrary.org>)

Denise Runge, Dean, Community & Technical College (<http://www.uaa.alaska.edu/ctc>)

John Mouracade, Dean, University Honors College (<http://www.uaa.alaska.edu/honorscollege>)

John Stalvey, Dean, College of Arts and Sciences (<http://www.uaa.alaska.edu/collegeofartsandsciences>)

Campus Directors

Talis Colberg, Director, Matanuska-Susitna College (<http://matsu.alaska.edu>)

Alan Fugleberg, Director, Kodiak College (<http://www.koc.alaska.edu>)

J. Daniel O'Connor, Director, Prince William Sound College (<http://www.pwscc.edu>)

Gary Turner, Director, Kenai Peninsula College (<http://www.kpc.alaska.edu>)

Board of Regents

Office of Regents' Affairs (<http://alaska.edu/bor>)

Brandi Berg, Executive Officer
University of Alaska
202 Butrovich Building
P.O. Box 755300
Fairbanks, Alaska 99775-5300

The Regents of the University of Alaska are appointed by the Governor and approved by the Legislature.

James R. Johnsen, President, University of Alaska

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Deena M. Bishop , Regent, Palmer	2015-2019
Sheri Buretta , Regent, Anchorage	2015-2023
John Davies , Regent, Fairbanks	2015-2023
Jyotsna Heckman , Regent, Fairbanks	2011-2019
Mary K. Hughes , Regent, Anchorage	2002-2025
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Lisa Parker , Regent, Soldotna	2015-2023
Karen Perdue , Regent, Fairbanks	2017-2025
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Faculty Emeriti

www.uaa.alaska.edu/academics/office-of-academic-affairs/emeritus-faculty

A

Nancy Andes, Professor Emerita of Sociology, 2009

John E. Angell, Professor Emeritus of Justice, 1998

Sharon K. Araji, Professor Emerita of Sociology, 2008
Saradell A. Ard, Professor Emerita of Art, 1985
Steven E. Aufrecht, Professor Emeritus of Public Administration, 2006

B

Elisha R. "Bear" Baker, Provost Emeritus, 2014
Gilbert W. Bane, Professor Emeritus of Biological Sciences (Kodiak College), 2005
Donald F. Behrend, Chancellor Emeritus, 1994
Gretchen T. Bersch, Professor Emerita of Adult and Developmental Education, 1997
Jean-Paul Billaud, Professor Emeritus of Music, 1985
Christiane Brems, Professor Emerita of Psychology, 2012
Sylvia C. Broady, Professor Emerita of Journalism & Public Communication, 1995
Marilyn Hanf Buckley, Professor Emerita of Education, 1997
Arthur E. Bukowski, Professor Emeritus of Mathematics, 1998

C

Omer L. Carey, Professor Emeritus of Business Administration, 1986
Thomas R. Case, Chancellor Emeritus, 2017
Ping-Tung Chang, Professor Emeritus of Mathematics, Matanuska-Susitna College, 2014
Barbara M. Christian, Professor Emerita of English, Kenai Peninsula College, 2009
Dennis W. Clark, Director Emeritus, Matanuska-Susitna College, 2011
Stephen G. Colt, Professor Emeritus of Economics, 2016
Robert E. Congdon, Professor Emeritus of Justice, 2005
Joseph F. Connors, Professor Emeritus of Communication, 1997
Ronald M. Crawford, Professor Emeritus of History/Geography, 2002
Kristine J. Crossen, Professor Emerita of Geological Sciences, 2018

D

M. Hilary Davies, Professor Emerita of Mathematics, 2013
Deborah C. Davis, Professor Emerita of Counseling, 1999
Donald I. Davis, Professor Emeritus of Geomatics, 2011
Tina D. DeLapp, Professor Emerita of Nursing, 2004
Peter W. Dowrick, Professor Emeritus of Psychology, 1994
Marie C. Doyle, Professor Emerita of Psychology, 1985
Claudia S. Dybdahl, Professor Emerita of Elementary Education, 2016

E

David P. Edgecombe, Professor Emeritus of Theatre, 2015
Richard L. Ender, Professor Emeritus of Management Information Systems, 1997
Margritt A. Engel, Professor Emerita of Languages, 2003
Ted G. Eschenbach, Professor Emeritus of Engineering Management, 1998

F

Elizabeth J. Fallon, Professor Emerita of English, Mat-Su College, 1999
Phyllis A. Fast, Professor Emerita of Anthropology, 2014
Kerry D. Feldman, Professor Emerita of Anthropology, 2010
Victor Fischer, Director Emeritus, Institute of Social & Economic Research, 1996

Ruth S. Fluornoy, Professor Emerita of Mathematical Sciences, 1999

G

George A. Geistauts, Professor Emeritus of Business Administration, 2016
Oliver Scott Goldsmith, Professor Emeritus of Economics, 2012
Edward Lee Gorsuch, Chancellor Emeritus, 2004
Elizabeth E. Graber, Professor Emerita of English, 2016
Ken Gray, Professor Emeritus of Art, 1994
G. Hayden Green, Dean Emeritus, College of Business & Public Policy, 2002
Judith F. Green, Professor Emerita of Library Science, 2015
Patricia R. Grega, Professor Emerita of Developmental Education, 2017

H

Lewis E. Haines, Professor Emeritus of Education, 1985
Ronald W. Haney, Professor Emeritus of Aviation Management, 2011
Michael C. Hawfield, Associate Professor Emeritus of History and Political Science, 2016
Stephen W. Haycox, Professor Emeritus of History, 2010
Leslie W. Heasley, Professor Emeritus of Chemistry, 2009
John M. Hilpert, Professor Emeritus of Engineering Management, 1987
Diddy R.M. Hitchins, Professor Emerita of Political Science, 2006
Patricia A. Hong, Professor Emerita of Nursing, 2005
Eileen K. Hughes, Professor Emerita of Early Childhood Development, 2007
T. Lee Huskey, Professor Emeritus of Economics, 2014

I

Charles H. Iliff, Professor Emeritus of Business Computer Information Systems, 1997
Catherine E. Innes-Taylor, Professor Emerita of Library Science, 2007

J

Stephen L. Jackstadt, Professor Emeritus of Economics, 2008
William A. Jacobs, Professor Emeritus of History & Political Science, 2002
Mary K. Janis, Professor Emerita of Biological Sciences, 2001
Francis L. Jeffries, Professor Emeritus of Business Administration, 2018
Stanley White Johnson, Dean Emeritus, College of Arts & Sciences, 1990
Virginia R. Johnson, Professor Emerita of Secondary Education, 2000
Mark E. Johnson, Professor Emeritus of Psychology, 2012
Garth N. Jones, Professor Emeritus of Public Policy & Administration, 1988

K

Bruno M. Kappes, Professor Emeritus of Psychology, 2016
Garry C. Kaulitz, Professor Emeritus of Art, 2014
Laura W. Kelley, Professor Emerita of Human Services, 2015
Sam Isamu Kimura, Professor Emeritus of Art, 1996
Gunnar D. Knapp, Professor Emeritus of Economics, 2016

John A. Kruse, Professor Emeritus of Public Policy, 1997
Jerry D. Kudenov, Professor Emeritus of Biological Sciences, 2017
Arlene E. Kuhner, Professor Emerita of English (posthumously), 1997
Richard W. Kullberg, Professor Emeritus of Biological Sciences, 1998

L

Stephen J. Langdon, Professor Emeritus of Anthropology, 2014
Ronald L. Lautaret, Professor Emeritus of Library Science, 1994
Frances E. Lautenberger, Professor Emerita of Theatre, 2012
Linda P. Lazzell, Vice Chancellor Emerita, Student Affairs, 2009
Charles "Sean" Licka, Professor Emeritus of Art, 2017
James J. Liszka, Professor Emeritus of Philosophy, 2011
He "Helen" Liu, Professor Emerita of Civil Engineering, 2016

M

David C. Maas, Professor Emeritus of Political Science, 1998
Robert J. Madigan, Professor Emeritus of Psychology, 2005
Elizabeth K. Madsen, Professor Emerita of Library Science, Mat-Su Library, 2003
Kristine E. Mann, Professor Emerita of Biological Sciences, 1999
Cheryl M. Mann, Professor Emerita of Human Services, 2009
Heidi A. Mannion, Professor Emerita of Medical Laboratory Science, 2018
Jerzy Maselko, Professor Emeritus of Chemistry, 2015
Glenn F. Massay, Director Emeritus, Matanuska-Susitna College, 1995
Linda J. McCarriston, Professor Emerita of Creative Writing and Literary Arts, 2015
Robert O. McCoy, Professor Emeritus of Mathematics, 2016
Beatrice Gray McDonald, Professor Emerita of Secretarial Science, 1976
E. Dean Milligan, Professor Emeritus of Biological Sciences, 1998
Donald E. Mohr, Professor Emeritus of History, 2006
Judith K. Moore, Professor Emerita of English, 2012
Thomas A. Morehouse, Professor Emeritus of Institute of Social & Economic Research, 1994
Roberta H. Morgan, Professor Emerita of Psychology, 1998
Max J. Morley, Professor Emeritus of Automotive & Diesel Technology, 1998
Christina M. Mumma, Professor Emerita of Nursing, 2005

N

William G. Nelson, Professor Emeritus of Engineering, 1998
Joseph Clay Nunnally, Professor Emeritus of English, 2015

O

Kathleen D. O'Dell, Professor Emerita of Secondary Education, 2006
Alvin S. Okeson, Director Emeritus, Matanuska-Susitna College, 2002
John A. Olofsson, Professor Emeritus of Civil Engineering, 2015
Sylvia M. Orr, Professor Emerita of Medical Laboratory Technology, 1998

P

Michael E. Pajot, Professor Emeritus of Sociology, 2008
Morris Greg Parrish, Professor Emeritus of Physics, 2012
Anne D. Pasch, Professor Emerita of Geology, 1997
Rebecca H. Patterson-Turner, Professor Emerita of English, 1999

Judith A. Petersen, Professor Emerita of Nursing Science, 2002
Kim M. Peterson, Professor Emeritus of Biological Sciences, 2014
Elizabeth J. Predeger, Professor Emerita of Nursing, 2017

Q

T. Bartlett Quimby, Professor Emeritus of Civil Engineering, 2014

R

Gail L. Renardson, Professor Emerita of English, PWSCC, 2012
Todd R. Risley, Professor Emeritus of Psychology, 2003
Alden M. Rollins, Professor Emeritus of Library Science, 1999
Rosellen M. Rosich, Professor Emerita of Psychology, 2015
Susan M. Ryan, Professor Emerita of Special Education, 2007

S

Kate E. Sandberg, Professor Emerita of English, 2002
Nancy E. Schafer, Professor Emerita of Justice, 2002
Stanley E. Sears, Professor Emeritus of Geomatics, 1998
Alice L. Sears, Professor Emerita of English, 2006
Bernard Segal, Professor Emeritus of Health Sciences, 2006
Lidia L. Selkregg, Professor Emerita of Public Administration/Planning, 1985
Thomas F. Sexton, Professor Emeritus of English, 1994
Donna Gail Shaw, Professor Emerita of Elementary Education, 2012
Carl E. Shepro, Professor Emeritus of Political Science, 2012
Elizabeth A. Sirles, Professor Emerita of Social Work, 2017
Orson P. Smith, Professor Emeritus of Civil Engineering, 2014
Ginger I. Steffy, Director Emeritus, Kenai Peninsula College, 2002
Troy G. Sullivan, Professor Emeritus of Education, 1986
Bjartmar Sveinbjornsson, Professor Emeritus of Biological Sciences, 2016

T

Glenn L. Trigiano, Director Emeritus, Facilities & Campus Services, 2011
Bradford H. Tuck, Professor Emeritus of Economics, 1999
Michael T. Turner, Professor Emeritus of Counseling, 2013

V

Douglas W. Veltre, Professor Emeritus of Anthropology, 2008

W

Garlyn R. Warren, Professor Emeritus of Business Computer Information Systems, 1997
David C. Wartinbee, Professor Emeritus of Biology, 2015
Lawrence D. Weiss, Professor Emeritus of Health Sciences, 2004
Brian D. Wick, Professor Emeritus of Mathematics, 2010
James R. Wilson, Professor Emeritus of English, 1984?
Mark E. Wolbers, Professor Emeritus of Music, 2018
Wendell W. Wolfe, Professor Emeritus of Education, 1979?
William B. Workman, Professor Emeritus of Anthropology, 2005

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